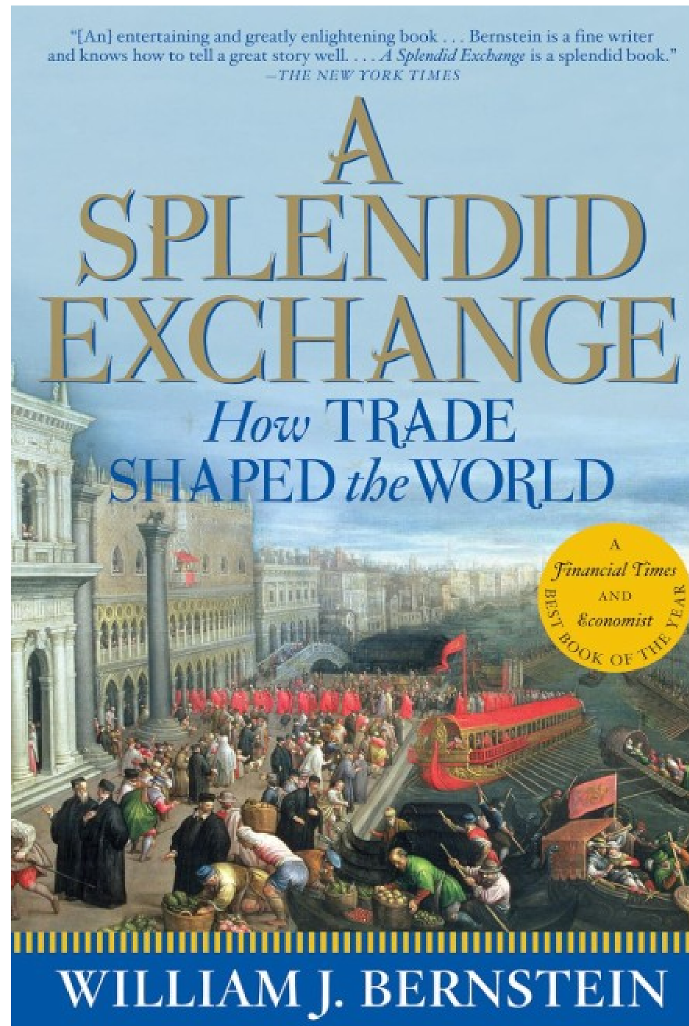
Are Trade Wars Easy to Win?

Tariffs are big news. For those desiring historical background, Grove Atlantic has kindly made available Chapter 13 of *A Splendid Exchange* (2008), which describes the antecedents, climax, and aftermath of the trade war triggered by the 1930 Smoot–Hawley Tariff Act.

To paraphrase Harry Truman's corollary to Santayana's famous dictum, the only thing that's new in the world is the history you haven't read. What follows is that history.

William Bernstein
February, 2025



13

COLLAPSE

We learned that a prohibitive protective tariff is a gun that recoils upon ourselves.—Cordell Hull[1]

It was the worst of times to be an American. Around the world, political leaders and editorialists condemned our foreign policy, which was seen, correctly, as unilateralist, arrogant, and dangerous. Outraged Europeans organized boycotts of our products. Wrote one Italian businessman to another, "The driver of an American car, in our province, particularly in the environment of the city, is continually made the butt of obscene gestures and epithets unworthy of a civilized people."[2] The French, as always, fretted about the growing power of the United States. One Parisian editorialist viewed opposition to the monster across the Atlantic as the duty of all Europeans—"the only means of struggling against American hegemony."[3]

What had incited such vigorous anti-Americanism? The invasion of Iraq? The conflict in Vietnam? The global ubiquity of McDonald's, Microsoft, and Disney? The period in question was 1930–1933, and the issue was the Smoot-Hawley Tariff.

One of the most notorious pieces of legislation ever passed by Congress, it is also one of the most poorly understood. Smoot-Hawley did dramatically raise U.S. tariffs, but they were already quite high. More important, and contrary to popular perception, it did not cause, or even greatly deepen, the Great Depression, nor was it a significant departure from previous American trade policy. Rather, Smoot-Hawley represented the high tide of worldwide protectionism that flowed on the new global agricultural trade.

The story begins with a brief tour of twentieth-century trade theory. The great premodern thinkers in the field—Henry Martyn, Adam Smith, and David Ricardo—described the *overall* benefits of free trade. They understood but largely ignored the fact that a significant minority of inno-

cent people were usually harmed. Their twentieth-century descendants—Bertil Ohlin, Eli Heckscher, Paul Samuelson, and Wolfgang Stolper—provided a framework that identifies who wins, who loses, and how they react.

By 1860, northern Europe, basking in the warm glow of the repeal of the Corn Law, the signing of the Cobden-Chevalier Treaty, and the "tariff disarmament" that followed, seemed firmly on the road to free trade. This pleasant and profitable voyage would not last long.

Cheaper transport means price convergence. Between the late 1850s and 1912, the cost of sending a bushel of grain from Chicago to Liverpool fell from thirty-five cents to around ten cents. Since faster and more reliable shipping also meant lower handling and insurance costs, the actual savings to consumers were even greater.

Predictably, during the six decades preceding World War I, wheat prices in the Old World and New World moved closer together, as shown in Figure 13-1.[4] A similar plot of price convergence in the late nineteenth century could be drawn for raw and manufactured commodities alike: beef, copper, iron, machinery, and textiles. In 1870, meat sold for 93 percent more in Liverpool than in Chicago; by 1913 this gap had narrowed to just 16 percent.

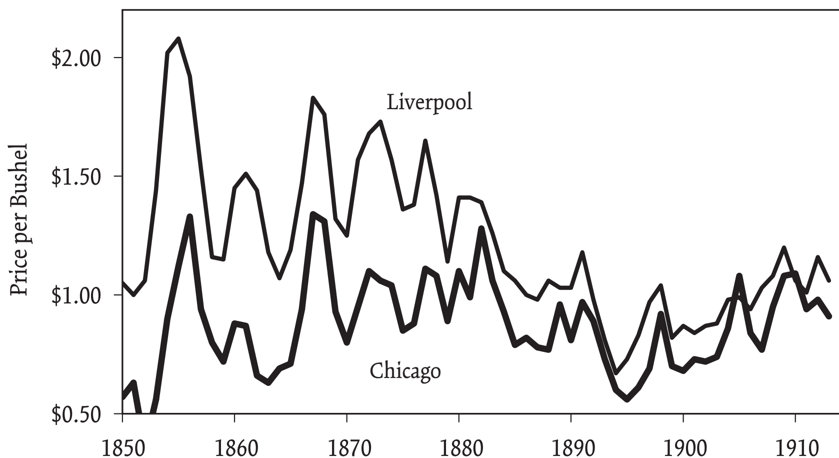


Figure 13-1. Wheat Prices in Liverpool vs. Chicago, 1850–1913

The dramatic increase in shipping efficiency not only produced convergence in agricultural prices but also eliminated the farmer's friend in hard times: high prices. In a world where it cost too much to import grain from the neighboring valley, let alone from across the ocean, a short crop was partially compensated for by a rise in price. In a global agricultural market with cheap shipping, even that comfort disappeared.[5] The loss of this familiar cushion provides as poignant an example as any of the risks of a globalizing economy.

The situation was reversed with manufactured products, which were initially cheaper in the labor- and capital-rich Old World. In 1870, pig iron was 85 percent more expensive in the United States than in England; by 1913, this gap had narrowed to 19 percent. Between these two dates the differential for smelted copper fell from 32 percent to zero, and the price structure for textiles actually reversed: textiles were 13.7 percent more expensive in Boston than in Manchester in 1870, and 2.6 percent more expensive in Manchester in 1913.[6]

Not only did the prices of the traditional grains begin to move together around the planet, they also danced in sync with the great staple of the East, rice. The nexus of the integrated rice-wheat market was India; a rise in the price of wheat in Bombay also increased that of rice, since Indians ate both. Further, the spread of long-distance submarine and land telegraph lines in the 1860s and 1870s meant that a movement in grain in Calcutta was instantly mirrored in the markets of London, Sydney, and Hong Kong.[7]

In the early twentieth century, two Swedish economists, Eli Heckscher and Bertil Ohlin, puzzled over these data and came to the conclusion that something even more profound was happening. The "classical economics" of Adam Smith, David Ricardo, and John Stuart Mill stipulated three inputs for all products: labor, land, and capital—paid for, respectively, with wages, rents, and interest.[8] Heckscher and Ohlin's essential insight was that decreased shipping costs created not only the global convergence of commodity prices, but also convergence of the prices of the three basic input factors: wages, rents, and interest rates.[9]

Recent research has confirmed their hypothesis. In the early nineteenth century, labor and capital were more abundant in the Old World than in the New World; therefore, wages and interest rates were low in the former and high in the latter. By contrast, land was far more abundant in the New World,

so rents were lower there. The economic historians Kevin O'Rourke and Jeffrey Williamson note that in 1870 in the New World, average real wages (defined as actual purchasing power) were 136 percent higher than those in the Old World; by 1913 this gap had decreased to 87 percent. Even more amazingly, between those two dates real American rents rose by 248.9 percent, while British rents *fell* 43.3 percent.[10]

The reasons for the convergence of rents were clear enough. Cheap transport flooded Europe with grain and meat, driving down their prices in the Old World and raising them in the New World, where they previously would have gone to waste. This in turn lowered the value of farmland in the Old World while raising it in the New World.

The convergence in the capital markets is even easier to understand. The telegraph removed uncertainty about distant interest rates and even allowed the instantaneous "wiring" of capital and credit.

The reasons for wage convergence are more controversial. The most obvious, and likely, explanation is migration driven by higher wages in the New World. Europeans did not emigrate to the New World yearning for freedom or streets paved with gold; they simply wanted higher hourly rates. During the late nineteenth century, an Irish carpenter could earn a far better living in New York, and an Italian peasant could prosper on the endless Argentine pampas in a way he never could in the poor soil of his native land. But as large numbers of Europeans migrated across the Atlantic Ocean, these earning differentials gradually disappeared, reducing immigration even before legal restrictions were instituted. In 1900, real wages were almost three times higher in Argentina than in Italy. By 1950 they were equal, and by 1985, the average Italian earned four times as much as his emigrant Argentine relatives.[11]

Were we to score the nineteenth-century transport revolution on points, Old World laborers and New World landowners (mainly farmers) won, and Old World landowners and New World workers lost. Admittedly, the lot of American workers did improve between 1870 and 1913, but their enormous advantage over their British counterparts eroded considerably. The same cannot be said for English landowners, who saw their rents fall disastrously.

In 1941, in the aftermath of the Smoot-Hawley debacle and in the midst of the world war to which it had contributed, an Austrian-born instructor at Harvard University, Wolfgang Stolper, approached a young

colleague, Paul Samuelson, with a question about trade theory. He wondered why classical economics taught that all nations benefited from trade when Heckscher and Ohlin's work implied that with increased trade, wages in some nations must fall, hurting workers. Samuelson realized that Stolper was on to something, and the two collaborated on what came to be known as the Stolper-Samuelson theorem, a framework that provides insight into the politics of global trade: who draws the long straw, who gets the short one, and, most important, how the political fallout affects the fate of nations.

Mathematics is the language of the economist, and in order to make their model work, Stolper and Samuelson could allow for only two products and two input factors—one that was scarce relative to that in other nations, and a second that was abundant relative to other nations. Their model predicted that protection benefited those who predominantly owned a relatively scarce factor and harmed those who owned a relatively abundant one.[12] With free trade, the opposite occurred. (The factors considered were typically the inputs of classical economics: land, labor, and capital.)

Let's see how this works. If labor is scarce in nation A and abundant in nation B, then wages will be lower in B, and labor-intensive products made in B will consequently be cheaper there as well. With free trade, merchants and consumers will prefer the less expensive goods made in B to those made in A. Workers in B will benefit, and workers in A will lose. This is true of the other two factors as well; free trade helps farmers in countries with abundant land and hurts those in countries with scarce land, and it helps capitalists in rich nations with abundant capital and hurts capitalists in poor nations.[13]

In Stolper and Samuelson's terms, "free trade" and "protection" refer not just to tariff levels and prohibitions, but also to the costs of transport. Reducing the price of shipping has the same effect as lowering tariffs: in other words, a reduction of fifty cents per bushel in transport costs and a reduction of fifty cents per bushel in tariffs should both increase grain commerce by roughly the same amount.

What does this mean in practice? Before 1870, England had, relative to other nations, abundant capital and labor, and scarce land. By contrast, the United States had relatively scarce capital and labor, but abundant land. Tariffs rose dramatically during that period around the world, especially in

the United States after the Civil War, but trade grew more free as rapidly decreasing shipping costs more than compensated for the higher tariffs. Table 13-1 shows the "Stolper-Samuelson grid" for some representative nations and time periods.

The Stolper-Samuelson theorem predicts that the main beneficiaries of increased trade would be the owners of abundant factors in each nation: capitalists and laborers in England, and landowners (that is, farmers) in the United States. This is precisely what happened, and thus it was no coincidence that all these groups favored free trade. Likewise it is no surprise that the owners of scarce factors in each nation—English landowners and American laborers and capitalists—sought protection.

What about continental Europe? In general, these nations had scarce capital and land but abundant labor. Stolper-Samuelson predicts that falling transport costs after 1870 would have generated a wave of protectionism by continental capitalists and farmers. Again, the theory is dead-on: European farmers reacted vehemently and brought to an end the free-trade era that began with Corn Law repeal and the Cobden-Chevalier Treaty.

In truth, the French had never been happy with the treaty, which was seen by their democratic forces and farmers as a "royal coup d'état" by a despotic Napoleon III. When the humiliating Franco-Prussian War of 1870–1871 brought Napoleon III's Second Empire to an end, French support of free trade faded with it.

The birth of the new French state, the Third Republic, occurred almost simultaneously with the flood of New World wheat. From time immemorial, the walls of terrain and distance had protected France's farmers, particularly those in the hinterland. The railroad and steamship destroyed these comforting barriers, and by 1881, net French wheat imports

Table 13-1. Stolper-Samuelson Categories

	Abundant Factor(s) (Favor Free Trade)	Scarce Factor(s) (Favor Protectionism)
United States before 1900	Land	Labor, Capital
United States after 1900	Land, Capital	Labor
England, 1750–present	Labor, Capital	Land
Germany before 1870	Labor, Land	Capital
Germany 1870–1960	Labor	Capital, Land
Germany after 1960	Labor, Capital	Land

passed the million-ton mark. Cheaper imported grain forced an increasing number of French farmers out of business, and they clamored for a new insulation to replace the one formerly provided by the wagon and the rutted road. There were simply too many farmers in France for an elected government to ignore; even as late as the end of the nineteenth century, about half of the nation's labor force still worked the land. Their protectionism was supported by strapped French financiers, the owners of the other scarce factor, capital. The nation's financiers, saddled with debt from the disastrous Franco-Prussian War, also saw salvation in higher tariff income. This combination of French capitalists and farmers proved decisive. By contrast, in England, only one-sixth of the labor force worked the land. And English financiers, flush with capital from industry and trade, opposed protection.[14]

Once again, the different outcomes in England and France matched the predictions of Stolper-Samuelson: in Britain, the abundant factors of labor and capital that favored free trade teamed up to defeat the scarce factor favoring protectionism, the landowners. In France, the scarce factors favoring protectionism, capital and landowners, combined to defeat the abundant factor favoring free trade, labor.

By the mid- to late-nineteenth century, every major nation had its disciple of Friedrich List and his "nationalist economics," as this brand of protectionism became known: Henry Carey in the United States; Joseph Chamberlain in England; and in France, Paul-Louis Cauwès, dean of the Sorbonne's law school. In 1884, France repealed a law, passed nearly a century before by the revolutionary government, that prevented farmers and other workers from banding together in associations based on economic interest. Almost immediately after the repeal, agricultural *syndicats* sprouted and demanded a tariff wall. A resultant flurry of legislation slowly raised duties on imported grain, farm animals, and meat. The general election of 1889 sent to the Assembly a large number of protectionist deputies, especially from the agrarian strongholds of Normandy and Brittany.

A dramatic series of parliamentary maneuvers and debates followed, the high point of which was a verbal duel between Léon Say, liberal economist and finance minister, and the protectionist Félix Jules Méline, a disciple of Cauwès and a future premier of France. Inveighing against any further tariff increases, Say argued that the struggle was not just between

protection and free trade, but rather a mere facet of "that great combat of the individual against the state."[15] Say's eloquence failed to move the Assembly, which in early 1892 passed the "Méline Tariff." It nearly doubled existing rates and was followed by even further increases that would continue until World War II.

The tariffs failed to stop the decline of agriculture in France and served only to burden its citizens with high food costs. Although many French observers decried their countrymen's fear of the new global economy, others were more fatalistic. In a commentary as descriptive of French national character today as it was when it was penned in 1904, the economist Henri Truchy noted:

> We judged it better to content ourselves with the untroubled possession of the domestic market than to risk the hazards of the world market, and we built a solid fortress of tariffs. Within the boundaries of this limited, but assured market, the French live calmly, comfortably enough, and leaving to others the torment of great ambition, are no more than spectators in the struggles for economic supremacy.[16]

Few Englishmen, however, shed tears over the harm done to the landed aristocracy by grain and meat from the New World. In the words of the economic historian Charles Kindleberger:

> No action was taken to halt the decline in farm prices or to assist the farming community. . . . Rents fell, young men left the farm for the town, land planted to crops shrank rapidly. The response to the decline in the world price of wheat was to complete the liquidation of agriculture as the most powerful economic group in Britain.[17]

After 1890 some British industries, notably steel, sugar refining, and jewelry, began to feel the landowners' pain, and they met increased American competition with cries for "fair trade." England was beginning to catch the protectionist influenza, spread by Joseph Chamberlain, a prominent politician (first in the Liberal Party, and then the Liberal Unionist Party), president of the Board of Trade, and father of the future prime minister Neville Chamberlain. His protectionism was of a different strain from the ordinary continental variety; it would have erected a high tariff wall around the entire empire and the commonwealths, within whose

ambit there would be free trade—so-called "imperial preference." But England was not ready to abandon free trade. Chamberlain's proposals became the major issue in the general election of 1906, in which he and his supporters were roundly defeated.[18]

While most of continental Europe walled itself off from foreign imports, and even the English fretted over their free-trade policy, one nation took a different path, based on, of all things, pigs and cows. The best meat comes from the youngest animals, and earlier slaughter means more intense feeding to bring them up to weight. After 1870, the combination of high demand, inexpensive refrigerated shipping, and cheap feed corn brought the stars into nearly perfect alignment for the world's producers of beef, pork, cheese, milk, and butter. For centuries, northern European nations held the lead in high-end animal husbandry, but curiously, only Denmark opened its markets and took advantage of the situation.

Great industries are usually born of banal concerns in humble circumstances. In 1882 a group of dairy farmers in the village of Hjedding in western Jutland (Denmark's large, mainland peninsula) organized a cooperative in order to purchase one of the expensive new milk-separating machines and jointly sell their cream and butter. They elected three directors who, after a long night of negotiation, came up with a members' agreement that would become the cornerstone of Denmark's rise to prosperity in the early twentieth century.

The contract was a model of simplicity: each morning, milk was collected by the cooperative's truck, taken to the factory, and processed by skilled technicians. The skimmed milk was returned to the farmer, the butter was sold on the open market, and the co-op's profits were divided among the participants according to the quality and quantity of whole milk they contributed. The members agreed to deliver to the co-op every last drop that was not immediately consumed in the farmhouse, and to collect it according to rigorous hygienic standards. The arrangement proved wildly successful, and within less than a decade, Danish farmers had organized over five hundred co-ops.

But this was only a prelude to the main event: bacon. In 1887 a group of hog farmers in eastern Jutland, unhappy with their rail service, banded together under the Hjedding model and built a state-of-the-art meat-packing plant. This time, the government took a hand: hog quality varies more than milk quality, and the Danish Agriculture Department set up

experimental stations in order to supply farmers with the best breeding stock. In 1871, Denmark had 442,000 pigs; by 1914, it had 2.5 million. Between those two dates, pork exports rose from roughly eleven million pounds to three hundred million. By the early 1930s, with over half of all Danish adults members of co-ops, this small nation exported 731 million pounds of pork—nearly half of the world's trade in it.

The government also gave farmers moral encouragement and suggested to national dairy and hog-farming organizations that they trademark the quality of their products abroad. The Lur brand, which evolved into the modern Lurpak label, is today featured in supermarket cases around the world.[19]

Both the creamery and the pork co-ops required relatively large amounts of borrowed capital to acquire factories, equipment, vehicles, and workers. The Danish experience remains to this day a powerful, though nearly forgotten, lesson on the appropriate government reaction to the challenge of global competition: support and fund, but do not protect.

In Germany, the specter of inexpensive agricultural products from the New World and manufactured goods from Britain had a far less positive result. For centuries, German economic and political life had been dominated by the Junkers, the Prussian counterpart of England's landed aristocracy.[20] These freewheeling farmers dominated Germany's "wild East" frontier with Poland and Russia, and over the centuries they accumulated an ever-increasing percentage of the nation's arable land. Nothing could stop them; even the abolition of serfdom in Prussia in 1807 allowed the Junkers to exploit their connections and appropriate more of the peasant's land. (And nothing did stop them until the Soviets confiscated their estates in 1945.)

Before 1880, the factor used most intensively by the Junkers, land, had been abundant, compared with land in Germany's neighbors at the time. Germany had been an exporter of wheat and rye and had been one of England's major sources of these two vital grains. Naturally, in those days the Junkers were free-traders. According to the economic historian Alexander Gerschenkron, they

> not very consistently, but very conveniently, had contrived to find a place for Adam Smith in the system of their general philosophy and had nothing but scorn and hatred for the protectionist doctrines of [their countryman] Friedrich List.[21]

After 1880, German landholdings looked puny relative to those in the new agricultural behemoths: the United States, Canada, Argentina, Australia, New Zealand, and Russia. Suddenly, the Junkers switched from being free-trading abundant-factor owners to being protectionist scarce-factor owners. As in France, a series of protectionist acts, most notably the "Bülow tariff" of 1902, dramatically raised import duties, particularly on grain.

This protectionist response benefited only the grain-growing aristocracy and was otherwise an unmitigated disaster. Along the way, the Junkers duped northern German peasants into supporting the tariffs by shielding their cows and pigs with high protective duties on imported animals and meat. As skilled at animal husbandry as their Danish neighbors, these poor farmers found themselves deprived of the cheap feed grain that would have made them prosperous. Protectionism's "silent killer"—the increased cost of raw materials to domestic industries—had struck again.

Worse was to come. Take another look at Table 13-1. Note that in every nation and time period, the factor owners square off against each other in a two-against-one configuration.[22] In both England and pre-1900 America, labor and capital found themselves on the same side—for free trade in the former, and for protection in the latter. In Germany, capital and land (the coalition of "iron and rye," so-called because the iron industry was an intensive consumer of the scarce capital factor) found itself opposed to urban laborers, who tended toward Marxism.

German urban workers favored free trade, not only because they represented the abundant factor, but also because of the perversities of the Marxist worldview. Free trade was an essential ingredient in the revolutionary recipe, since it supported industrial development and full-fledged capitalism, which then would inevitably crumble and clear the way for communism.[23] Marx, logical to a fault, thus opposed tariffs:

> The protective system of our day is conservative, while the free trade system is destructive. It breaks up old nationalities and pushes the antagonism of the proletariat and bourgeoisie to the extreme point. In a word, the free trade system hastens the social revolution. In this revolutionary sense alone, gentlemen, I vote in favor of free trade.[24]

By identifying who favors and who opposes open markets, Stolper-Samuelson helps to explain political alliances. In the twentieth century, the world would find out that the German coalition of xenophobic, protectionist landowners and capitalists arrayed against socialist, free-trading workers was a prescription for fascism. In nineteenth-century England, on the other hand, capitalists and workers united in favor of free trade against the old landowning oligarchy, a profoundly democratic development. (American capitalists and workers did the same, but with a different objective—protectionism.) Obviously, this interpretation of Stolper-Samuelson, developed by UCLA political scientist Ronald Rogowski, is a simple model that takes no account of race, culture, or history, and Rogowski himself repeatedly cautions that his model is only part of the story. That said, the insights it affords into political processes around the world are remarkable.[25]

The rapid erection of tariff barriers between 1880 and 1914 should have choked off global commerce. In fact, no such thing occurred; between those two dates, the volume of world trade approximately tripled, driven by two forces. First, the steam engine continued to prove mightier than the customhouse, as savings on shipping costs more than made up for increased import duties. Second, the planet had grown much richer, with total world real GDP nearly quadrupling during that thirty-four-year period. All other things being equal, wealthier societies trade more, since they have more excess goods to exchange. This means that, in general, the volume of trade grows faster than wealth; between 1720 and 1998, world real GDP grew by an average of 1.5 percent per year, while the real value of trade grew by 2.7 percent per year.[26]

Ever since the Civil War, American tariff policy had followed a monotonous cycle of protectionism under Republicans and moderation under Democrats. In the election of 1888, the Republican Benjamin Harrison narrowly defeated the Democrat Grover Cleveland (who actually won the popular vote). The Republican congressional delegation, led by Senator William McKinley, took this as a "mandate" to pass the notorious tariff named after him, which he rode to the presidency eight years later. After the election of the Democrat Woodrow Wilson in 1912, the McKinley Tariff was replaced by the Underwood Tariff, which gradually drove import duties to a historic low of 16 percent in 1920.

The Underwood Tariff was to be a short-lived victory for American free-traders. Not long after it was passed, the Republicans recaptured the presidency and Congress. Two years later, in 1922, the protectionist Fordney-McCumber Tariff was signed into law by President Harding. Soon enough, import duties stood at over 40 percent.

Besides being ludicrously high, Republican tariffs tended also to be "autonomous." That is, they were set by Congress, and while they gave the president power to punish trading partners with higher rates, they did not allow him to decrease levels. Democratic tariffs, such as the Underwood Act, generally left open the possibility of reductions and talks with trading partners, although these options were rarely exploited, for fear of arousing Republican legislators.[27]

Between 1830 and 1910, the costs of shipping by sea, canal or river, and land had fallen by 65, 80, and 87 percent, respectively. By World War I, most of the juice had been squeezed out of the transport efficiency orange. Certainly, great advances in transportation—the internal combustion engine, the airplane, and the shipping container—were made in the twentieth century. But by the outbreak of the Great War, even bulk cargoes such as ore, guano, and timber routinely rounded the Horn—and under sail at that. The slowing rate of improvement in transport efficiency no longer offset large tariff increases or a severe downturn in the world economy. Unfortunately, both a worldwide depression and a rapidly escalating tariff wall combined in the fiasco wrought by Herbert Hoover.

A successful mining engineer who had turned to public service, Hoover rose to prominence directing relief efforts in war-torn Europe. When questioned about the wisdom of feeding Russians, some of who were Bolsheviks, in the aftermath of the revolution, he is said to have replied, "Twenty million people are starving. Whatever their politics, they shall be fed!"[28]

Hoover had always been a protectionist, and he remained one during his tenure as secretary of commerce under Harding and Coolidge. Although conversant with mining textbooks, he had either not read or not understood Ricardo and believed that nations should import only those products that could not be produced domestically. In 1928 he overtly appealed to farmers, a traditional Democratic constituency, who had been hurt by falling crop prices:

> [We] realize that there are certain industries which cannot now successfully compete with foreign producers because of lower foreign wages and a lower cost of living abroad, and we pledge the next Republican Congress to an examination and where necessary a revision of these schedules to the end that American labor in these industries can again command the home market, may maintain its standard of living, and may count upon steady employment in its accustomed field.[29]

It would have been more accurate to call the bill he eventually signed the "Hoover Tariff," but that infamy fell instead to its two sponsoring Republicans, Senator Reed Smoot of Utah and Representative Willis Hawley of Oregon. Raising the average tariff on dutiable goods to nearly 60 percent, Smoot-Hawley was no bolt from the blue; it merely propelled the already high rates of the Fordney-McCumber Act into the stratosphere.

Even before Smoot-Hawley's passage, two groups reacted with horror: Europeans and economists. By the time the legislation reached the Senate, foreign ministries the world over sent protests to the State Department and boycotts were already under way; virtually all American economists of any stature—1,028 in all—signed a petition to Hoover pleading for a veto.[30]

To no avail. On June 17, 1930, he signed Smoot-Hawley into law and so set off retaliation and trade war. Covering tens of thousands of items, the bill seemed designed to offend every last trading partner. It deployed many "non-tariff barriers" as well. For example, bottle corks constituted about half of Spanish exports to the United States; not only did the new law increase the tariffs on corks to prohibitive levels, it also required that they be stamped with their country of origin, a process that actually cost more than the cork itself.

The act slapped high tariffs on foreign watches, particularly inexpensive ones that competed with American "dollar watches." One Swiss worker in ten either labored in, or was closely connected to, the watch industry, and the issue galvanized the normally agreeable and peaceable nation into righteous anger. The watches and corks nicely illustrate the impotence of small nations; whereas shipments to the United States accounted for 10 percent of Swiss exports, trade in the reverse direction

accounted for only one tenth of 1 percent of American exports. The feeling of helplessness among the Swiss and Spaniards magnified their anger.

The Continent's large nations, Italy, France, and Germany, were in a better position to land punches, and they did so against the pride of American industry: its automobiles and radios, raising average import duties on these items well above 50 percent. It took no small provocation to goad Benito Mussolini into action on this issue; an auto aficionado who loathed the indifferent quality of Italy's largest manufacturer, Fiat, Il Duce had for years resisted the protectionist demands of its president, Giovanni Agnelli. Smoot-Hawley finally exhausted his patience, and he responded with tariffs approaching 100 percent that almost completely shut off imports of American vehicles.[31] (Some things really never do change: the Agnellis continued to control Fiat, produce lousy cars, and demand protection almost into the twenty-first century.) By 1932, even free-trading England piled on, passing a 10 percent tariff on most imported goods and convening a Commonwealth Conference in Ottawa that erected a protectionist wall around the empire.

So it went, all over the world, for three years after the passage of Smoot-Hawley in 1930, as French lace, Spanish fruit, Canadian timber, Argentine beef, Swiss watches, and American cars slowly disappeared from the world's wharves. By 1933 the entire globe seemed headed for what economists call autarky—a condition in which nations achieve self-sufficiency in all products, no matter how inept they are at producing them.

America had brought the world to the brink of international commercial collapse, and it would take an American to reverse the process. Born in a log cabin in tobacco-growing eastern Tennessee, Cordell Hull had acquired a homespun understanding of Ricardian economics and, more important, of the moral value of trade. His grasp of the subject is best revealed by this passage from his memoirs:

> When I was a boy on the farm in Tennessee, we had two neighbors—I'll call them Jenkins and Jones—who were enemies of each other. For many years there had been bad feeling between them—I don't know why—and when they met on the road or in town or at church, they stared at each other coldly and didn't speak.
>
> Then one of Jenkins' mules went lame in the spring just when Jenkins needed him the most for plowing. At the same time Jones ran short of corn for hogs. Now it happened that Jones was through

> with his own plowing and had a mule to spare, and Jenkins had a bin filled with corn. A friendly third party brought the two men together, and Jones let Jenkins use his mule in exchange for corn for the hogs.
>
> As a result, it wasn't long before the two old enemies were the best of friends. A common-sense trade and ordinary neighborliness had made them aware of their economic need of each other and brought them peace.[32]

As a Democratic congressman for nearly a quarter century, Hull fought a valiant rearguard action against both Fordney-McCumber and Smoot-Hawley, and in 1930 he won a Senate seat, only to resign it two years later when Roosevelt chose him as secretary of state. On his arrival at Foggy Bottom, he was confronted by no fewer than thirty-four formal protests against American tariffs from foreign governments.

Like Cobden a century before, he took his message to the country, and then he took it abroad. With trade approaching a standstill and the world in the throes of depression, he reasoned to anyone who would listen that in the present sorry circumstances: "It should be obvious [that] high tariffs could not be the infallible and inevitable producers of prosperity they had been represented to be."[33] Foreign nations, he continued, could not be expected to purchase our products if they could not earn cash by selling to us.

His toughest audience was the new president, whose fear of the Republicans drove him to almost immediately backtrack from his campaign promises of free trade. Hull gradually won him over by pointing out that the Fordney-McCumber and Smoot-Hawley tariffs emasculated the president's ability to conduct international commercial relations. The wily Hull proposed to Roosevelt that Smoot-Hawley be merely "amended" to allow the president to increase or decrease its rates by half and to unilaterally offer foreign nations other limited concessions, such as a guarantee that an item on the duty-free list would remain there. The resultant legislation, the Reciprocal Trade Agreements Act of 1934, checked the world's nearly half-century march toward protection and autarky. It ran for three years, and was then repeatedly renewed by Congress.

Hull began modestly and first negotiated an agreement with Cuba, then peeled Canada away from the Ottawa Accords. Next, he negotiated agreements with most of the rest of the hemisphere, followed by treaties

with the major European nations, Australia, and New Zealand before finally negotiating a largely symbolic agreement with England just as the lights were going out in Europe for the second time in a generation. Hull served the longest term as secretary of state in American history—just under twelve years—before finally resigning in 1944 because of poor health.

There had, of course, been winners during the trade debacle of 1930–1933: Fiat, wine growers in California, watchmakers in Waltham, Massachusetts, and radio manufacturers in Germany. But overall, damage had been done. How much? From an economic perspective, surprisingly little. In the first place, since economic growth is such a powerful driver of trade, proving an effect in the opposite direction—that protectionism makes the world poor (or that free trade makes it rich)—is problematic. Between 1929 and 1932, real GDP fell by 17 percent worldwide, and by 26 percent in the United States, but most economic historians now believe that only a minuscule part of that huge loss of both world GDP and the United States' GDP can be ascribed to the tariff wars.

A back-of-the-envelope calculation shows that this must have been true. At the time of Smoot-Hawley's passage, trade volume accounted for only about 9 percent of world economic output. Had all international trade been eliminated, and had no domestic use for the previously exported goods been found, world GDP would have fallen by the same amount—9 percent. Between 1930 and 1933, worldwide trade volume fell off by one-third to one-half. Depending on how the falloff is measured, this computes to 3 to 5 percent of world GDP, and these losses were partially made up by more expensive domestic goods.[34] Thus, the damage done could not possibly have exceeded 1 or 2 percent of world GDP—nowhere near the 17 percent falloff seen during the Great Depression.

Even more impressively, the nations most dependent on trade did not suffer the most damage. For example, in Holland, trade accounted for 17 percent of GDP, and yet its economy contracted by only 8 percent in those years. By contrast, trade constituted less than 4 percent of the United States' GDP, yet its economy contracted by 26 percent during the Depression.[35] The inescapable conclusion: contrary to public perception, Smoot-Hawley did not cause, or even significantly deepen, the Great Depression.[36]

If the 1930s trade war did not greatly harm the world economy, it certainly choked off international commerce. As just mentioned, world

trade fell dramatically during the Smoot-Hawley years. Between 1914 and 1944, world trade volume remained stagnant, an unprecedented event in three decades of modern history, during which world GDP had approximately doubled in spite of two devastating global conflicts.

Recently, economic historians have calculated that the tariff wars of the 1930s caused less than half of this falloff in trade, the rest being due to the Great Depression itself, which decreased demand for trade products. Interestingly, the combination of "specific tariffs" and deflation caused at least as much unintentional damage as the intentional increases in tariff rates. Specific tariffs are those calculated on a per pound or per unit basis; if the price per pound falls and the amount of tariff per pound does not, this unintentionally increases the effective ad valorem rates. That is, a specific tariff of twenty cents per pound on meat worth forty cents amounts to a 50 percent tariff; if the price of the meat falls to twenty cents, the effective ad valorem rate is now 100 percent.[37]

The real long-term damage done by the tariff war was not to the world economy, which was minimal, or even to world commerce, which recovered relatively rapidly. Rather, it was the damage to the intangibles of trade: the expansion of consumption beyond domestic goods, commerce with and living among foreigners, and understanding their motives and concerns. Farmers Jones and Jenkins of Hull's parable were finally made to understand that they were worth more to each other alive than dead, but in the run-up to World War II, the nations of the world did not realize this until it was too late. The political and moral benefits of trade had in fact been eloquently described by John Stuart Mill nearly a century before:

> The economical advantages of commerce are surpassed in importance by those of its effects which are intellectual and moral. It is hardly possible to overrate the value, in the present low state of human improvement, of placing human beings in contact with persons dissimilar to themselves, and with modes of thought and action unlike those with which they are familiar. . . . Commerce first taught nations to see with goodwill the wealth and prosperity of one another. Before, the patriot, unless sufficiently advanced to feel the world his country, wished all countries weak, poor, and ill-governed but his own: he now sees in their wealth and progress a direct source of wealth and progress to his own country.[38]

During the first half of the twentieth century, patriots around the world less and less felt the world their country, and this would cause no little grief. America learned the hard way that protection invites retaliation; a nation cannot trade out without trading in.

America also learned that a trade war could start a real war, and even before the United States entered World War II, historians and statesmen sensed that its isolationism and protectionism had contributed to the cataclysm. The historian John Bell Condliffe, writing in 1940, presciently observed, "If an international system is to be restored, it must be an American-dominated system, based on *Pax Americana*."[39] Albert Hirschman, a participant in the events of the period, noted in 1945:

> [Trade wars] undoubtedly sharpen national antagonisms. They also provide excellent opportunities for nationalist leaders to arouse popular resentment . . . international economic relations provide them with an excellent instrument to achieve their ends, just as a promise of a quick and crushing victory by means of aerial superiority undoubtedly contributed in a most important way to the present war.[40]

As the United States emerged from the horrors of World War II, it began the long, difficult job of dismantling the tariff walls erected over most of the preceding century. Those seeking the origins of today's globalized, multinational-dominated economy will find it in a long-forgotten State Department report published in 1945, *Proposals for the Expansion of Trade and Employment.* Although this remarkable document originated within the American wartime bureaucracy, it was infused with the spirits of Smith, Ricardo, Cobden, and Hull.[41]

Its drafters sensed that they were actors on a unique historical stage—one on which everything around them was a shambles, and in which the fate of the entire world depended on just how they reassembled the pieces. As expressed in the opening sentence of *Proposals,* "The main prize of the victory of the United Nations is a limited and temporary power to establish the world we want to live in."[42]

Proposals went on to catalog the mistakes that had been made and to suggest how, in general, to avoid repeating them, and then, more specifically, how to negotiate the unraveling of the protectionism that had crippled international commerce since 1880. It was nothing more and

nothing less than a road map for the new commercial *Pax Americana*. The economic historian Clair Wilcox, writing in 1948, neatly summarized America's transformation from autarky to leader of the new international commercial order:

> [After the First World War] we made new loans to the rest of the world; now, again, we are making such loans. But then, we sought to recover, with interest, sums that we had advanced to our allies to finance the prosecution of the war. And, at the same time, we raised our tariff so fast and so far as to make it difficult, if not impossible, for any of these debts to be paid. Now, however, we have written off the wartime balance of the lend-lease account and we have taken the lead in reducing barriers to trade. We have come, at last, to recognize the requirements of our position as the world's greatest creditor. We have demonstrated that we can learn from history.[43]

The first order of business was to get the British on board. By 1945, the positions of England and the United States had completely reversed; heavily indebted Britain sought to choke off imports so as not to erode its scarce currency reserves, whereas the U.S. State Department wanted to open up world commerce as rapidly as possible. After tough negotiations, the victors reached a compromise: multilateral trade talks would proceed, but with all participants allowed an "escape clause" if they determined that lower tariffs might produce "sudden and widespread injury to the producers concerned."

The newly opened world trade was, at least initially, an American creature, an accident of the singular international economic conditions at the end of the war. With the United States the last man standing, American farmers, workers, and capitalists had relatively little to fear from foreign competition in any sphere. In the immediate postwar years, Americans of all stripes offered little resistance to lower tariffs.[44]

In early 1947, trade officials from twenty-two major nations, using *Proposals* as their blueprint, paired off in Geneva in a dizzying round of more than a thousand bilateral conferences covering more than fifty thousand products. The negotiations yielded a document that became known as the General Agreement on Tariffs and Trade (GATT), signed by twenty-three nations (Pakistan having been born during the process) on November 18, 1947.

Table 13-2. GATT Rounds

Year	Round/Event	Action
1947	Geneva	45,000 reductions in bilateral tariffs covering one-fifth of world trade
1949	Annency, France	5,000 reductions in bilateral tariffs
1951	Torquay, England	8,700 reductions in bilateral tariffs, covering most of items not previously affected
1955–1956	Geneva	$2.5 billion reduction in bilateral tariffs
1960–1962	Dillon Round	$5 billion in bilateral tariff reductions; EEC talks begin
1964–1967	Kennedy Round	$40 billion reduction in bilateral tariffs, negotiation rules established
1973–1979	Tokyo Round	$300 billion reduction in bilateral tariffs, procedures on dispute resolution, dumping, licensing established
1986–1993	Uruguay Round	Further tariff reductions, difficulties in rationalizing agricultural tariffs
1995	WTO Established	WTO takes over GATT process
2001–present	Doha Round	Talks stalled on North/South issues and agricultural subsidies

Just three days later, fifty-six nations entered into negotiations in Havana for the formation of the International Trade Organization (ITO), which was to oversee succeeding GATT rounds. Curiously, the ITO died, a victim of indifference in the U.S. Congress and of the Republican victory in the congressional election of 1946, whereas GATT flourished.[45] By the end of its third round in Torquay, England, in 1951, the prewar barriers to industrial products had been largely demolished. This fall is reflected in the levels of the United States' import tariffs, plotted in Figure 13-2.

Proposals' anonymous authors had, perhaps unwittingly, cracked one of the central problems of free trade, which modern economists and sociologists refer to as the "logic of collective action."[46] Free trade provides modest benefits for most of the population while greatly harming small groups in specific industries and occupations. Imagine, for example, that the United States forbade the importation of foreign-grown rice. This would greatly enrich a few thousand domestic growers, as they would make millions, and most Americans would not notice the few extra dollars per year hidden in their grocery bills. Domestic growers, each of whom

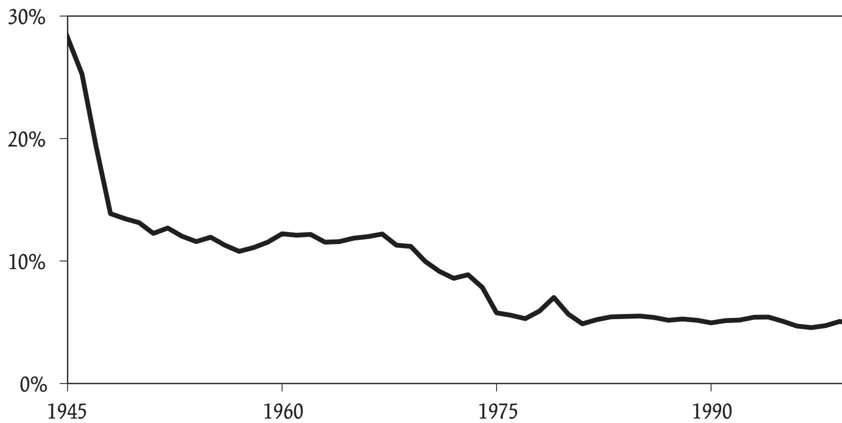


Figure 13-2. U.S. Import Tariffs on Dutiable Goods Under GATT

has a large stake in the issue, would resist any attempt to open the market up to foreign rice much more actively than the hundreds of millions of consumers who would each benefit a tiny amount each year from less expensive imported rice. The GATT, in essence, created a global "consumers' union" representing the world's billions of disenfranchised buyers, each nicked a few pennies, francs, or yen every time the cash register rang.

As a rough approximation, then, we can divide the history of modern globalization into four periods. The first period spans the years between 1830 and 1885, when rapidly falling transport and communication costs combined with relatively low tariffs (except in the United States) to dramatically increase the volume of trade and to produce global convergence of wages, land prices and rents, and interest rates. During the second period, roughly between 1885 and 1930, intense agricultural competition from the Americas, Australia, New Zealand, and the Ukraine caused a European protectionist backlash; this was easily overwhelmed by the continuing fall in transport prices.[47] The third period, which began with the passage of Smoot-Hawley in 1930, saw slowing improvements in transport technology swamped by large tariff hikes. These events resulted in a devastating fall in world trade.[48] During the fourth period, which began

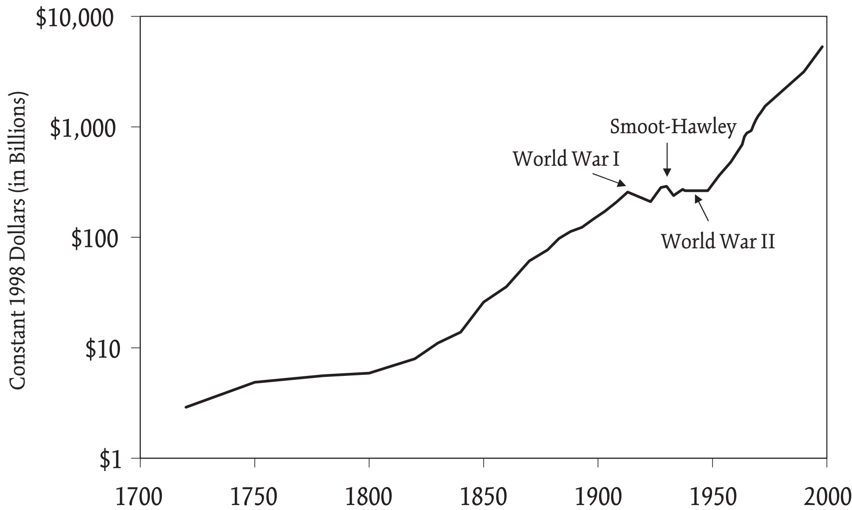


Figure 13-3. Real Value of World Trade: 1720–2000 (Constant 1998 Dollars)

in 1945, the free-trade initiative led by the United States, as outlined in *Proposals,* opened the floodgates of world trade. The real value of world commerce exploded and grew at the astonishing rate of 6.4 percent per year over the next half century. Between 1945 and 1998, the volume of world trade increased from 5.5 percent of world GDP to 17.2 percent.

The postwar increase in trade volume and the nearly simultaneous rise of longshoremen's unions combined to make the journey from cargo hold to freight car (or, increasingly, diesel truck) nearly as expensive as the journey across the ocean. An exhaustive government study of the freight carried on one transatlantic voyage by one vessel, the SS *Warrior* found that more than one-third of the cost of getting its cargo to its final destination was incurred on the pier. For cargoes to and from Hawaii, the cost was closer to 50 percent.

America's founding fathers made few missteps in crafting the Constitution, but surely none did more harm than the five "extra" words in the famous Commerce Clause of Article I, which gave the federal government the power "to regulate commerce with foreign nations, *and among the several states,* and with the Indian tribes." The power to regulate commerce among the states eventually gave rise in 1887 to the Interstate Commerce Commission (ICC), which regulated nearly every aspect

of long-range transport in the United States, corroded nearly every industry it touched, and stifled American transport innovation until it was finally abolished in 1995.

For more than a century, merchants had sought an "intermodal" shipping device that could be seamlessly loaded and unloaded among train, truck, and ship. In 1837 a shipper in Pittsburgh, James O'Connor, devised a boxcar that could be either fitted with train wheels or mounted on a canal barge, and in 1926 the Chicago North Shore and Milwaukee Railway began to "piggyback" trailers onto flatcars. The ICC decided that such intermodal devices fell under its authority and promptly brought their development to a halt.

In the mid-1950s, two events revolutionized the technology. The first was the brainchild of a visionary trucking executive, Malcolm McLean: a prototype of the modern shipping container, specifically designed to stack inside a surplus military tanker, chosen because of its relatively rectangular hull. The second was a federal court ruling in 1956 that removed intermodal containers from the ICC's purview.

The widespread adoption of McLean's new system saw port costs plummet over the next few decades. If international freight had been cheap before 1960, afterward it became practically free—in the unlovely jargon of economics, "frictionless."[49] Freed of burdensome tariffs and shipping costs, goods began circulating more freely around the globe. If shirts or cars could be produced ever so slightly cheaper in a given country, then their production would shift there.

At the same time that shipping costs were shrinking almost to nothing, Europe was becoming rich. The Continent's new wealth aligned European capitalists, now the owners of an abundant factor, with labor in favor of lower tariffs. As predicted by Stolper-Samuelson, Europeans embraced both free trade and democracy. Although the European Community supported its farmers with subsidies under the so-called Common Agricultural Policy, this did not prevent the decline of agriculture: in 1950, farmers made up 35 percent of the Continent's workforce; in 1980, just 15 percent.

The post-World War II period would see an even greater flip-flop in the trade policies of America's major political parties. As the nation became increasingly prosperous and its capital became ever more abundant, the Republicans, the traditional party of capital, changed their

allegiance from protectionism to free trade. (This switch occurred during the Eisenhower administration.) The Democrats, on the other hand, have traditionally represented the interests of laborers, the owners of a scarce factor, and farmers, the owners of an abundant factor. Over the course of the twentieth century, the relative size of the labor force grew while that of the farming population shrank; today, farmers constitute just 1 percent of the work force. As a result of this shift in their constituency, the Democrats swung toward protectionism, and in response, farmers defected en masse to the Republican Party.

Ronald Rogowski provides a final, intriguing twist to Stolper-Samuelson; just as his paradigm suggests who favors or opposes free trade, it also suggests which groups see their power enhanced or diminished by their nation's trade policy. The rise of protectionism in the 1930s empowered the owners of scarce factors both in the United States (labor, represented by the Democratic Party) and in Germany (land and capital, represented most ferociously by the Nazis). So too does the rise of free trade today empower those who favor it, most spectacularly the owners of America's abundant factors—land and capital—represented by the Republican Party. Rogowski observed in 1987:

> As far as one can now foresee, the Democrats . . . will increasingly embrace protectionism and, much as Labor in Britain, will be reduced to a regional party of industrial decay. In the burgeoning and export-oriented West and South the Republicans will achieve something close to one-party domination.[50]

Over the next twenty years, Rogowski's prediction came increasingly true. Only very recently has protectionism again begun to gain traction in the heretofore solidly Republican West and South. How well the Republicans will maintain their dominance of these regions in the face of the Bush administration's colossal mistakes in foreign policy remains to be seen.

Although GATT dramatically altered the balance of power in the battle between protectionism and free trade, it did not succeed with all cargoes. Agriculture and textiles represent two of the world's oldest and largest economic sectors. Over the centuries both sectors have acquired great

expertise in politics and propaganda and have thereby managed to escape, at great cost to consumers, the rigors of the new global marketplace. In most countries, farmers have succeeded in portraying themselves as the "soul of the nation," in spite of the fact that they constitute no more than a small percentage of the workforce in most developed countries.

From the outset, the world's farmers and textile manufacturers were able to exclude themselves from the GATT framework and maintain high tariffs and, even more importantly, non-tariff barriers such as quotas, restrictions, and subsidies on both domestic production and exports.

The survival of protection for textiles and agricultural products has clearly cost the world's developing nations dearly, as these are the two areas in which they have the greatest comparative advantages. Exactly how and why this occurred is a matter of some controversy. One interpretation is that GATT is yet one more mechanism of rationing crumbs from the white man's table to the world's poorest nations, crippling them in precisely those areas in which they are best able to compete. According to an alternative explanation, the world's developing nations are hell-bent on autarky and essentially indifferent to the GATT process, unwilling or unable to meet the developed nations halfway.

The evidence favors the latter explanation. Developing nations typically levy agricultural import tariffs in excess of 50 percent (over 100 percent in India), as compared with 30 percent in Europe and 15 percent in the United States. Second, until very recently, many developing nations, led by India, openly espoused a policy of "import substitution"—the encouragement of a broad range of domestic industries with high tariffs. (Indian autarky is symbolized in its original national flag by Gandhi's *chakra,* or spinning wheel. Just before independence, this was replaced, to Gandhi's dismay, with the *ashoka chakra,* the wheel of law.) Finally, as will be seen in Chapter 14, the developing nations that opened themselves to international commerce have prospered mightily.[51]

To see protectionism's modern face, meet the Fanjuls. The heirs of wealthy Cuban sugar growers who fled the island after Fidel Castro's victory in 1958, and one of Florida's wealthiest families, these three brothers today own 160,000 acres of prime Florida cane fields, in addition to 240,000 acres in the Dominican Republic. The Labor Department has repeatedly singled out their holding company, Flo-Sun, for abuse and underpayment of workers, and the Department of the Interior extracted

from them a huge settlement for toxic runoff from their fields into the Everglades.[52]

One federal agency, however, takes a sunnier view of the Fanjuls: the Agriculture Department, which in recent years has paid them an average of $65 million annually for their sugar—more than twice the world price—as part of a broad system of agricultural supports costing taxpayers $8 billion per year.[53] To the Fanjuls, this $65 million subsidy is just so much change left under the plate; the main event is quotas, which jack up grocery prices by keeping foreign crops out of the United States and in 1998 robbed American consumers of an estimated $2 billion for sugar alone.[54] Not coincidentally, the Dominican Republic, home to huge Fanjul plantations, has the highest import quota among the world's sugar-producing nations. Nor is this all: the Army Corps of Engineers spends an estimated $52 million per year keeping these sugar fields dry, damaging the environment yet more.[55]

How did the Fanjuls and their peers manage to secure such government largess over the decades? By giving generously to various political campaigns in the form of both direct and "soft" money. One of the most fascinating passages in the independent counsel's referral to the House's impeachment proceedings against William Clinton related to his dalliance with Monica Lewinsky. The president demonstrated his famous talent for multitasking by combining these sessions with telephone conversations. On only one occasion did he ask his dedicated young aide to leave the room so that he could answer a call in private. The caller was neither the British prime minister nor the pope, but Alfonso ("Alfie") Fanjul.[56]

Since the inception of GATT, virtually all nations have sidestepped its best efforts to lower barriers to agricultural trade—the rich nations with non-tariff barriers (mainly subsidies) and the poor ones with direct tariffs.[57] After the September 11 attacks, the United States and Europe convened the Doha Round of GATT talks under the auspices of the newly formed World Trade Organization (WTO)—the successor to the ITO. The Doha Round explicitly sought to end all subsidies by 2013 in order to alleviate poverty in the developing world, the breeding ground for international terrorism.

Negotiations collapsed ignominiously in July 2006 in a hail of mutual recrimination. None of the three major parties to the talks—Americans, Europeans, and developing nations—could bring itself to offend its sacro-

sanct farmers. One observer noted that the failure of the Doha Round was a "big victory for the farm lobby groups," and the Indian representative declared, "We can't negotiate subsistence and livelihood . . . we should not even be asked to do that." The European negotiator, Peter Mandelson, noted even more candidly before the talks that the Continent would lose "next to nothing" if the negotiations failed.[58] There is one consolation: as the world has become a wealthier place, protected food and clothing constitute an ever smaller proportion of the global economy. (In 2006, for example, Americans spent less than 10 percent of their income on food, down from 24 percent in 1929.[59])

World trade has not quite evolved to the point described by John Stuart Mill in the epigraph of chapter 12, where "all things would be produced in the places where the same labor and capital would produce them in the greatest quantity and quality," but it is getting there rapidly. In the process, the frictions and crises described in the previous chapters will multiply and accelerate.