

Chapter 3

U.S. Trade Policy since 1934

Introduction

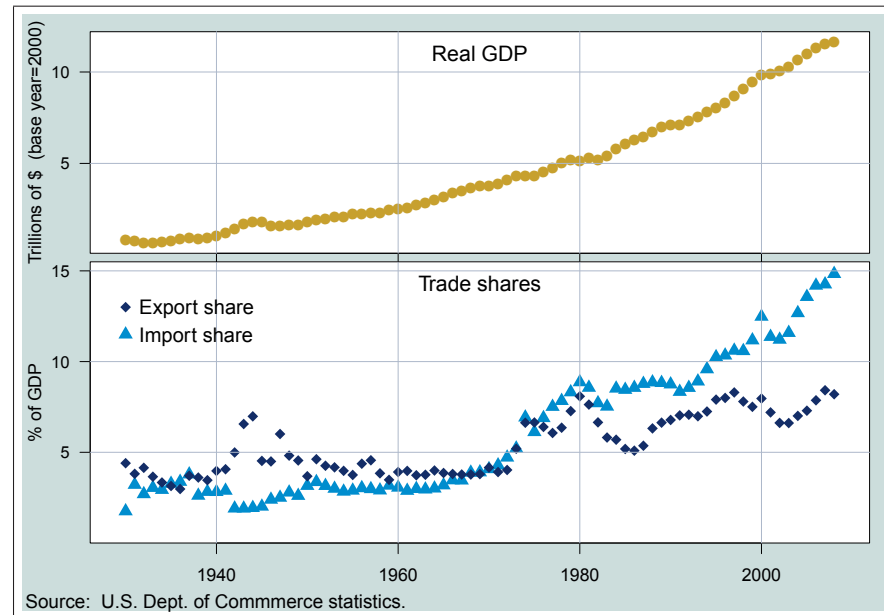
U.S. trade policy has evolved greatly in the 75 years since the passage of the landmark 1934 Reciprocal Trade Agreements Act (RTAA). At the beginning of this era, the United States and its trading partners had in place high import tariffs. There was no multinational international agreement that set out rules of trade between nations, and the few trade agreements that existed had generally been negotiated on a bilateral basis. Trade negotiations, when they occurred, were focused on manufactured goods and the elimination of tariffs.

Since that time, the United States and its trading partners have reduced or removed many barriers to trade. Tariffs have been lowered or eliminated on nearly all products, and average tariff rates for the United States declined from 18.4 percent in 1934 to 1.3 percent in 2007.¹ Other industrialized countries have similarly lowered their tariffs. Trade has become a larger component of U.S. GDP during this time (figure 3.1).

Significant strides have been made in international cooperation. Trade negotiations now take place in an established multilateral framework that provides stability and continuity to the negotiations. An initial set of

¹Data are weighted-average tariff rates as a percent of all imports. Compiled from official statistics of the U.S. Department of Commerce.

FIGURE 3.1 U.S. real GDP (top) and U.S. exports and imports as a share of GDP (bottom), 1930–2008



multilateral trade rules, embodied in the General Agreement on Tariffs and Trade, was negotiated in 1947 with the United States as one of the 23 founding contracting parties.² The General Agreement remained the primary set of rules and organizational structure for nearly 50 years until the negotiation of the Uruguay Round Agreements and the establishment of the World Trade Organization (WTO) in 1995.

Trade negotiations have been extended far beyond their initial emphasis on manufactured goods and tariff rates. In recent decades, nontariff measures have taken on greater importance as tariffs have declined, and multilateral negotiations have included nontariff measures since the beginning of the Kennedy Round in 1964. The Uruguay Round (1986–93) was the widest reaching of all and included significant reductions

²For purposes of this chapter, the term “General Agreement” refers to the agreement itself (the General Agreement on Tariffs and Trade) and the term “the GATT” refers to the organization. However, the reader should be aware that the term “GATT 1947” is now used to refer to the General Agreement as it existed before January 1, 1995, when the Uruguay Round Agreements were implemented. The term “GATT 1994” is used to refer to the General Agreement as it existed on and after January 1, 1995.

in tariffs; the tariffication of quotas on agricultural goods; the phase-out of quotas on textiles and apparel; the expansion of the rules relating to trade in goods; the establishment of new rules relating to investment, intellectual property, and trade in services; a binding dispute settlement process; and the establishment of a permanent organization to administer the agreements, the World Trade Organization.

A survey of the economic literature on trade provides a clear picture of the effects of trade policy on the United States. There is near unanimity in the literature that trade liberalization has broadly benefited the United States, although assessments differ considerably about its precise effects. It is well recognized that the gains from trade liberalization are more widely dispersed than the losses, which may make the losses more apparent. However, the economy-wide benefits of trade liberalization are estimated to be positive even after taking into account the costs of adjusting an economy to trade openness. Another observation made in the literature is that further tariff reductions provide fewer gains to economic welfare when tariff barriers are already at very low levels.³ This is particularly true for the United States and other developed countries as their average tariff rates edge toward zero. Finally, recent economic literature has begun to include analysis of services barriers and nontariff barriers; reductions in these types of barriers are estimated to have a greater potential effect on welfare than can be currently derived from additional reductions in tariffs.

This chapter provides an overview of U.S. trade policy since 1934 and summarizes the literature on the economic effects of these policy changes on the United States. The first part, organized into four time periods, examines the key steps and results of U.S. trade policy since 1934. The second part summarizes the economic literature on the effects of trade liberalization, with brief discussions of economic theories and their quantitative implications. For the purposes of this study, the referenced literature was selected from peer-reviewed literature. For the section on the history of U.S. trade, the literature review drew heavily on experts in the fields of economic history, political economy and U.S. trade law. The section on economic effects focuses on analytical and rigorous studies, both theoretical and quantitative.⁴ Context and summary points have been added where necessary to provide the reader with a narrative structure.

³Welfare is used throughout this chapter in its economic sense; it corresponds approximately to household income, taking into consideration the prices of goods purchased by the household and the variety of goods available.

⁴The chapter will not, as a rule, explore the interplay of exchange rate policy and trade policy. For details on the exchange rate regime that prevailed until the mid 1970s when the

A timeline of important legislation, policy changes, and related events is available at the end of this chapter.

History of U.S. Trade Policy since 1934

This section of the chapter provides a chronology of events since passage of the 1934 Reciprocal Trade Agreements Act (RTAA). This chronology of the last 75 years documents the course of U.S. efforts to increase trade openness. The period can be divided into four major eras. During the first era, from 1934 until the beginning of World War II, the United States began to reduce barriers and expand trade via a series of bilateral agreements with its main trading partners to mutually reduce tariffs. After World War II, trade policy shifted toward a multilateral approach under the auspices of the GATT. Following the post-war period of trade opening came a third era during which progress in multilateral negotiations continued, with successive rounds of negotiations resulting in further tariff reductions and increasingly in rules regulating nontariff issues. As multilateral trade liberalization contributed to the growth of new export-oriented industries in developing countries, the resulting disruptions to importing countries gave rise to a series of measures in the form of voluntary export restraints and marketing arrangements, such as the Multifiber Arrangement for textiles and apparel.

Finally, the most recent period in U.S. trade policy has been marked by a renewed effort toward liberalization on multilateral, regional, and bilateral fronts after the United States completed a free trade agreement with Israel in 1985. In 1989, the United States entered into a free trade agreement with Canada and then in 1994 began implementing an expanded free trade agreement that included Mexico (NAFTA). The Uruguay Round negotiations, concluded in 1994, further reduced tariffs on a global basis and included new agreements on issues of critical importance to many U.S. industries, such as intellectual property, investments, and trade in services. In the post-1995 period, the United States continued to negotiate and implement free trade agreements; chronologically, these agreements were with Singapore, Chile, Australia, a group of Central American and Caribbean countries (CAFTA), Morocco, Bahrain, Oman, and Peru. Three

United States left the gold standard see Krugman and Obstfeld, *International Economics*, 2000, chap. 18, and in particular, 557–61.

additional agreements are awaiting approval at the time of this writing: Colombia, South Korea and Panama.

The Reopening of Trade (1934–1941)

After more than a decade of increasingly high barriers to U.S. imports, the 1934 RTAA signaled what was to be the beginning of a long push to liberalize trade. Before tracing that path, however, it is useful to step back a few years and look at the Tariff Act of 1930, commonly known as the Smoot-Hawley Act.

While economists have debated the precise impact of the Smoot-Hawley Tariff Act of 1930, it has come to epitomize the trade restricting sentiment in the United States at the outset of the Great Depression.⁵ This legislation was originally intended to protect domestic agricultural interests from low-priced imports that arose from global surges in farm production in the aftermath of World War I.⁶ The stock market crash of 1929, however, prompted demands for increased protection from all sectors of the economy. What were initially seen as a series of limited adjustments in duties affecting selected agricultural and manufacturing products escalated through “log rolling” into the more substantial tariff increases incorporated into the Tariff Act of 1930.⁷ International retaliatory moves led to a dramatic decline in the volume of world trade. Such actions included an increase in tariffs by the United Kingdom, prohibitive Italian tariffs on automobiles, significantly increased Spanish duties on products largely imported from the United States (e.g., automobiles, tires, tubes, and motion pictures), and similar Canadian actions against U.S. imports.⁸

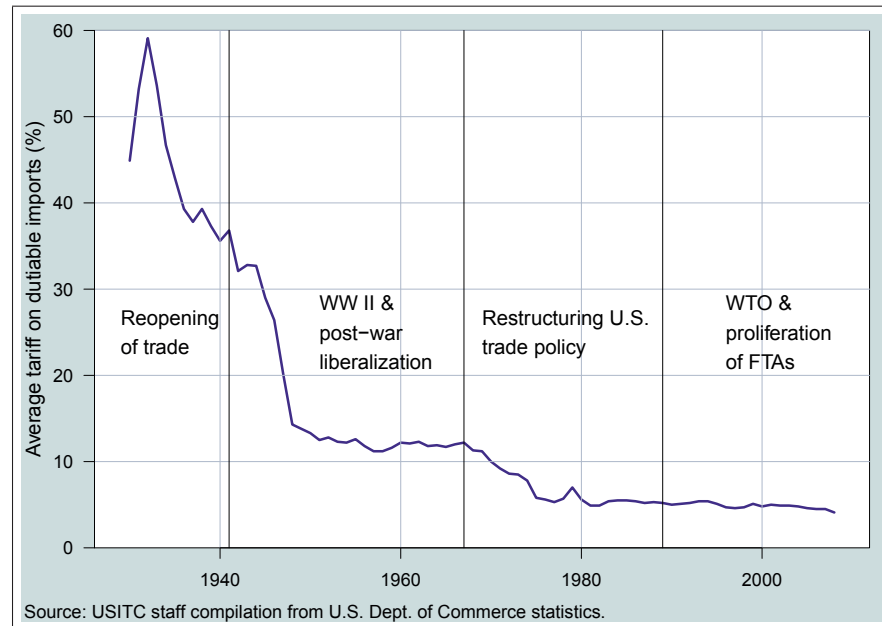
⁵Irwin notes, however, that the increase in average tariffs due to Smoot-Hawley was somewhat more modest than often thought, at about a 23 percent increase (as applied to actual 1928 imports). For purposes of comparison, the Fordney-McCumber tariff increase of just eight years earlier pushed the average tariff rate up by 64 percent. Nevertheless, the cumulative effect was to push tariff rates to historic levels. Irwin, “From Smoot-Hawley to Reciprocal Trade Agreements,” 1998, 334.

⁶Chorev, *Remaking U.S. Trade Policy*, 2007, 44.

⁷Taussig, *The Tariff History of the United States*, 1931, 498.

⁸Eichengreen notes that the extent to which increased foreign trade restrictions were a reaction to Smoot-Hawley versus a reflection of protectionist sentiments in those countries is not completely clear. Eichengreen, “The Political Economy of the Smoot-Hawley Tariff,” August 1986, 47. Retaliatory moves are also discussed in great detail in Jones, *Tariff Retaliation*, 1934.

FIGURE 3.2 U.S. trade-weighted tariffs on dutiable imports and historical periods, 1930–2008



The average ad valorem equivalent tariff rose from 40.1 percent to 47.1 percent from mid-1929 to mid-1930.⁹ More significantly, however, most tariff rates incorporated in the 1930 act were *specific duties* (expressed as dollars per physical unit of the imported good) rather than a percentage of the import value. The effect of specific duties was such that reducing import prices would increase the ad valorem equivalent tariff even with no change in statutory tariff rates.¹⁰ Global price deflation in the early 1930s therefore led to further tariff increases in percentage terms, and the mean U.S. ad valorem tariff peaked at almost 60 percent in 1932 (figure 3.2). Two years after the Smoot-Hawley Act, the volume of both U.S. exports and imports had fallen by approximately 41 percent.

⁹The average ad valorem equivalent tariff is the value of collected tariffs as a percentage of the value of dutiable imports. Irwin, “The Smoot-Hawley Tariff,” May 1998, 327.

¹⁰For example, an item worth \$100 that has a specific duty of \$10 would have an ad valorem equivalent tariff of 10 percent. However, if deflation caused the item’s value to drop to \$50, the item’s ad valorem equivalent tariff would then rise to 20 percent.

Prior to the 1930 act, tariff changes were viewed as entirely the domain of Congress.¹¹ The depth of the global depression and the rise in barriers imposed by foreign trading partners, however, made it clear that international negotiations would be required to reverse these effects, as trading partners were unlikely to lower barriers to U.S. exports unless the United States acted in a similar manner. Although the President could engage in multilateral negotiations, the need for a two-thirds majority in the Senate to approve a resulting treaty made other countries less likely to engage in such negotiations.

The Roosevelt administration, which took office in 1933, was sympathetic to reducing tariffs, but in the midst of the depression, political support for unilateral reductions was lacking.¹² The President therefore requested, though not until March of 1934, that Congress authorize him to negotiate bilateral or multilateral tariff-reduction agreements. The RTAA was signed into law in June 1934.

The goal of the RTAA was export promotion, as its opening line stated it was “[f]or the purpose of expanding foreign markets for the producers of the United States.”¹³ The RTAA permitted the President to conclude bilateral, reciprocal trade agreements with a view toward reducing the tariffs of mutual interest to the United States and specific trade partners.¹⁴ This allowed the President to engage in a more streamlined negotiating process.¹⁵ The RTAA led to a series of bilateral tariff-reduction agreements, although these were not across-the-board cuts but rather selective reductions taking into account the possibility of injury to particular industries. The U.S. reductions were generally applied according to the “most-favored-nation” (MFN) principle that had been in effect under U.S. trade law since 1923, in that tariff preferences granted to one country were automatically granted to imports into the United States from all

¹¹Irwin, “From Smoot-Hawley to Reciprocal Trade Agreements,” 1998, 331.

¹²Dam notes that Secretary of State Cordell Hull, a long-time proponent of low tariffs, called for an “immediate unilateral reduction in U.S. tariffs” via a 1925 draft resolution in the U.S. House of Representatives. Dam, “Cordell Hull,” October 2004, 2.

¹³Reciprocal Trade Agreements Act of 1934, Pub. L. No. 73-316 (1934).

¹⁴These bilateral agreements did not need to be submitted for congressional approval. Irwin, “From Smoot-Hawley to Reciprocal Trade Agreements,” 1998, 341.

¹⁵The initial law was valid for a three-year period. It was renewed repeatedly and has existed in some form since 1934 with a few major lapses: 1967–74, 1994–2002, and since 2007. Currently, the President does not have this power, now called trade promotion authority.

other countries.¹⁶ “Free-riding”¹⁷ by other countries was minimized by striking deals “only on commodities in which the negotiating country was a ‘principal supplier’.”¹⁸

Tariff reduction necessitated finding alternate sources of government revenues.¹⁹ While the share of federal revenues derived from customs duties had been steadily falling since the turn of the century (it was 40 percent in 1910 before the 1913 ratification of the Sixteenth Amendment established the modern system of income taxes), the percentage of federal revenues coming from tariffs was still 14.5 percent in 1930.²⁰ By 1940 this share fell to 4.8 percent and by 1950 to 1 percent (where it has remained to date).

Agreements had been signed under the RTAA with 21 countries representing approximately 60 percent of U.S. trade by June 1940.²¹ The

¹⁶Trebilcock and Howse present an extensive discussion of the rationale for and history of MFN principles. There are both political and economic rationales for the principle, such as avoiding tensions among countries due to perceived discrimination in economic policy and inefficient distortions of trade flows that would result in its absence. Trebilcock and Howse, *The Regulation of International Trade*, 2005. The United States had long adhered to a “conditional” MFN policy in which tariff concessions negotiated with one country would be extended to others *but* only if those others made reciprocal concessions. Irwin, “From Smoot-Hawley to Reciprocal Trade Agreements,” 1998, 333. However, in 1923, President Harding approved adoption of unconditional MFN in future commercial treaties. The United States subsequently announced it would in the future adhere to an “unconditional” MFN policy—in which “any negotiated U.S. tariff reduction would be automatically applied to all countries that had an MFN treaty with the United States.” Irwin, “The Smoot-Hawley Tariff,” 1998, 333; U.S. Tariff Commission, *Operation of the Trade Agreements Program*, Report No. 160, 1949.

¹⁷In other words, a country with MFN status could benefit without liberalizing any of its own import tariffs.

¹⁸Irwin, “From Smoot-Hawley to Reciprocal Trade Agreements,” 1998, 27–28.

¹⁹Taussig, in describing a phase-in period for a reduction in the sugar duty incorporated in the Tariff Act of 1913 notes “the sugar duty contributed heavily to the customs revenue. The income tax, which was expected to make up for the loss in the customs revenue, would almost certainly require time for working out its full yield.” Taussig, *The Tariff History of the United States*, 1914, 426.

²⁰Personal and corporate income taxation provided a rapidly increasing share of federal revenues, rising to 30 percent in 1935, to 77 percent in 1950, and to 93 percent today (including payroll taxes).

²¹Irwin, “From Smoot-Hawley to Reciprocal Trade Agreements,” 1998, 343; Beckett, *The Reciprocal Trade Agreements Program, 1941*, 32, 124. These countries (in chronological order of their effective dates) were: Cuba, Belgium, Haiti, Sweden, Brazil, Canada, the Netherlands, Switzerland, Honduras, Colombia, France, Guatemala, Nicaragua, Finland, El Salvador, Costa Rica, Czechoslovakia, Ecuador, the United Kingdom, Turkey, and Venezuela. Through 1945, 32 agreements were negotiated. Jackson, *World Trade and the Law of GATT*, 1969, 37.

average U.S. ad valorem tariff on dutiable imports had fallen to 25.3 percent by 1946 (figure 3.2).²² Despite these bilateral trade agreements and similar arrangements undertaken by other developed economies, and perhaps due in part to the shift toward war-related production in some countries, growth in global trade lagged behind growth in overall economic activity during the slow recovery from the depression.²³

World War II and Postwar Liberalization (1941–1967)

World War II brought bilateral trade negotiations largely to an end. Bilateral negotiations were not resumed even after the war ended, as there were limitations to the approach. The primary limitation was the obligation under the principle of MFN to provide all trade partners with the same nondiscriminatory treatment as given to a specific partner under a bilateral trade agreement.²⁴ But perhaps more importantly, the 1941 Atlantic Charter between the United States and the United Kingdom promoted the view that broad international economic collaboration was necessary to avoid the “beggar-thy-neighbor” policies that followed World War I, which were thought to have led to the economic inequities and resulting resentments that contributed to the start of World War II.²⁵ In calling for renewal of the Trade Agreements Act in 1945, the President—referring to post-war economic policy underway—said:

The purpose of the whole effort is to eliminate economic warfare, to make practical international co-operation effective on as many fronts as possible, and so to lay the economic basis for the secure and peaceful world we all desire.²⁶

After the war, the United Nations (with the United States as one of the 51 charter member countries) was established to provide a forum for both political and economic issues. One of the first goals of the United Nations, through its Economic and Social Council, was to establish the International Trade Organization (ITO). The 1947–48 Havana Conference on Trade and

²²Irwin, “Trade Restrictiveness,” 2007, 33.

²³Eichengreen and Irwin state that “[f]rom 1932 to 1938, GNP rose 29 percent in the industrialized countries, while export volume increased 24 percent and import volume rose a mere 14 percent.” Eichengreen and Irwin, “Trade Blocs,” 1995, 4.

²⁴Dam, “Cordell Hull,” October 2004, 6.

²⁵Jackson, *World Trade and the Law of GATT*, 1969, 37–38.

²⁶As quoted in Jackson, *World Trade and the Law of GATT*, 1969, 39.

Employment concluded with the Havana Charter, an agreement by 52 countries, which was to prepare the way for the ITO.²⁷ However, the ITO concept of a multilateral institution was abandoned when it became clear that the United States would not accept the Havana Charter.²⁸

Preparatory work on the ITO, however, did result in the set of trade rules and disciplines embodied in the General Agreement on Tariffs and Trade, which was signed by 23 countries including the United States in October 1947.²⁹ The General Agreement, and the informal organization (the GATT) created to oversee its implementation, became the vehicle for multilateral trade negotiations for the next 50 years. The first GATT negotiations, held in Geneva, led to U.S. tariff reductions, effective January 1948, which brought the average U.S. ad valorem rate on dutiable imports down to 13.9 percent from 19.4 percent in 1947, though a considerable part of that reduction was due to increased import prices rather than negotiated reductions in specific duties.³⁰

At the time the General Agreement was drafted, the United States was a major exporter of agricultural goods. Moreover, it had in place a substantial set of price and quantity controls on agriculture established under the 1933 Agricultural Adjustment Act. The General Agreement was drafted to exempt existing agricultural programs maintained by the United States and other parties. The United States played a significant role in this exemption.³¹ After a 1951 amendment to the 1933 act that required certain import quotas, the United States requested and received a waiver in 1955 that permitted the new U.S. agricultural quotas.³²

The Annecy (1949), Torquay (1950–51), Geneva (1955–56) and Dillon (1961–62) Rounds produced only small tariff reductions.³³ However, these rounds slightly increased the number of signatories to the GATT and consolidated the initial gains of the GATT by signaling the commitment of the members to the new structure of trade negotiations (see figure 3.3).³⁴

²⁷McGovern, *International Trade Regulation*, 1995, 1.11-1.

²⁸Diebold suggests that a variety of domestic groups, as well as the lack of political will or power by the Truman administration, contributed to the charter's failure to pass the U.S. Congress. Diebold, "The End of the ITO," 1952, 3.

²⁹The GATT was originally conceived as an agreement within the context of the ITO. Jackson, *World Trade and the Law of the GATT*, 1969, 43.

³⁰Irwin, "From Smoot-Hawley to Reciprocal Trade Agreements," 1998, 346.

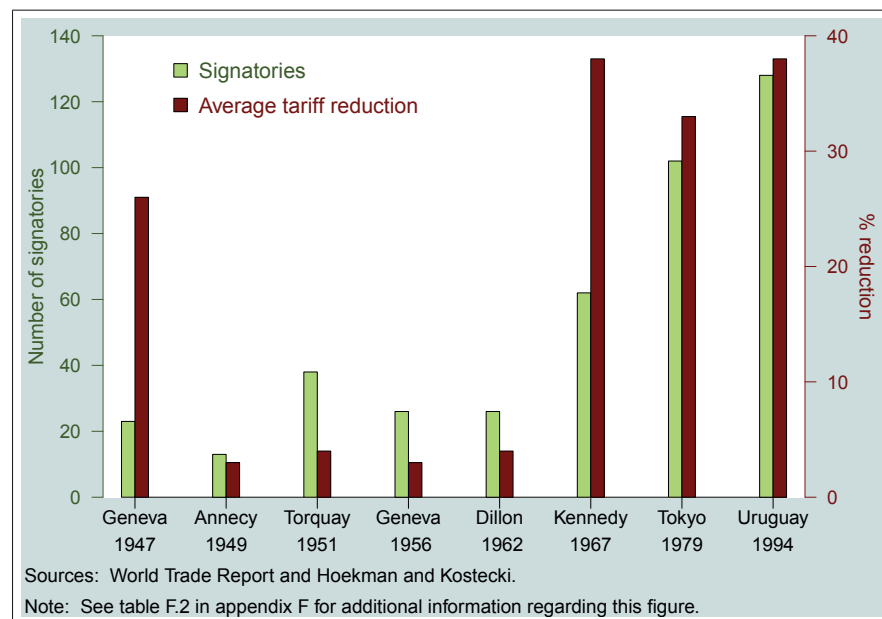
³¹Jackson, *World Trade and the Law of GATT*, 1969, 733.

³²Jackson, *World Trade and the Law of GATT*, 1969, 734-735.

³³Irwin, "From Smoot-Hawley to Reciprocal Trade Agreements," 1998, 346.

³⁴Table F.2, provides a detailed summary of all negotiating rounds under the GATT.

FIGURE 3.3 GATT round summary: number of signatories (left axis) and weighted average tariff reductions (right axis)



Several European countries attempted to create their own economic linkages in order to reduce the possibility of renewed hostilities by forming the European Coal and Steel Community (ECSC) in 1951 and the European Economic Community (EEC) in 1957. These regional trading blocs encouraged subsequent multilateral trade negotiations as the United States was unwilling to be shut out of the European market.³⁵

The United States entered the 1960s in robust macroeconomic health. U.S. productivity growth was stable at an average annual rate of 3 percent during the 1960s, and inflation remained low, with an average below 3 percent over the same time frame.³⁶ The strength of the economy relied heavily on the country's post-war manufacturing preeminence. The European and Japanese economies, decimated by World War II, began the decade still lagging behind the United States but had made significant progress rebuilding their manufacturing capabilities by the end of the decade.

³⁵Irwin, "The GATT in Historical Perspective," 1995, 326.

³⁶Pearson, *United States Trade Policy*, 2004, 10.

In the context of continued growth, the Trade Expansion Act of 1962 was passed. The primary aim of the act was to authorize the President to negotiate further reductions in duties. The act authorized the President to negotiate across-the-board tariff-rate cuts³⁷ as well as tariff reductions of up to 50 percent, an increase from the 1958 extension of the RTAA that only allowed reductions of up to 20 percent. The Trade Expansion Act also moved the locus of trade negotiations to the separate U.S. government office of the newly created Special Trade Representative.³⁸ The 1962 Trade Expansion Act passed Congress with the support of the labor unions, who were reassured by the inclusion of the new Trade Adjustment Assistance (TAA) program designed to help workers in industries adversely affected by trade.³⁹ However, the TAA program was subject to strict criteria, and no favorable action was granted to workers seeking relief until 1969;⁴⁰ even through 1974 relatively few workers had obtained compensation under the TAA.⁴¹

Restructuring U.S. Trade Policy (1967–1989)

The 1967–89 period was marked by a struggle among domestic interests over the trade liberalization framework. This domestic struggle arose out of the considerable pressures placed on U.S. manufacturers in import-competing industries during the 1960s and 1970s when European and Japanese firms emerged from their post-World War II rebuilding efforts with a greater level of competitiveness. Additionally, the late 1960s and 1970s presented a series of macroeconomic challenges, including the oil shocks, the end of fixed exchange rate regimes, and high inflation, which further disrupted U.S. industries. Domestic producers in certain vulnerable industries, particularly labor-intensive manufacturers, pushed for legislation against imports, while export-oriented producers, including certain agricultural exporters, opposed new U.S. barriers that might lead to reciprocal barriers against U.S. exports. Those domestic producers in favor of restricting trade were initially successful in reducing imports from

³⁷As noted by Chorev, this was a change from prior extensions of the RTAA that permitted only line-by-line negotiations. Chorev, *Remaking U.S. Trade Policy*, 2007, 61.

³⁸Office of the USTR, “History of the U.S. Trade Representative,” undated (accessed February 2, 2009).

³⁹Destler, *American Trade Politics*, 1995, 23.

⁴⁰Baldwin, “The Changing Nature of U.S. Trade Policy,” 1984a, 13.

⁴¹Fewer than 54,000 workers received compensation under the program through 1974. Kenan, *The International Economy*, 2000, 228.

a limited number of countries via quota-based agreements or voluntary export restraints (VERs).⁴² As will be explained in detail in this section, these practices were gradually applied to other vulnerable industries, as well as to a broader set of countries. The effect was a significant loss of momentum in the reduction of trade barriers and an increase in trade barriers in certain areas. However, this trend began to reverse itself toward the end of the era, when a set of trade remedy laws was established to address the concerns of those in the import-competing industries, while at the same time a broader liberalization agenda was revived.

Voluntary Export Restraints (VERs)

As early as the mid-1950s, certain import-competing industries began lobbying for government action against imported goods. The most vulnerable industries—those that employed domestic labor intensively, those that competed with foreign labor-intensive manufacturing processes, or those with easily adoptable technologies—were among the most fervent in their lobbying efforts. Much of this effort was initially directed against Japan’s cotton textile manufacturers.⁴³ In order to deflect charges of unfair trade practices and to avoid punitive tariffs, Japan voluntarily agreed to restrict its exports to many of its trade partners. These VERs were initially applied to certain cotton products in 1955 at the time of Japan’s accession to the GATT. Even with the agreement in place, many GATT members declined to grant MFN status to Japan.⁴⁴ This was done via the “opt-out” clause of the GATT, which allowed any member to refuse to grant MFN status to any country at the time of that country’s accession.⁴⁵ With the trade restraints in place, Japan eventually achieved MFN status from GATT members. The VER agreements with the United States called for Japan to restrain its textiles exports to approximately 1.5 percent of U.S. domestic production of textiles, with a one-time 5.2 percent increase in exports

⁴²Voluntary export restraints are restraints placed by exporting countries (usually exporters of low-priced goods) on their own goods, generally after considerable pressure by the importing country.

⁴³Japan’s exports of cotton textiles increased sixfold from 1945 to 1955, providing sudden competition for U.S. manufacturers. Hunter and Macnaughtan, “Textile Workers in Japan,” 2008, 39. It should be noted, however, that by 1959 Japan had merely regained its prewar share of textile world trade. Keesing and Wolf, *Textile Quotas Against Developing Countries*, 1980, 12.

⁴⁴The United States did extend MFN status to Japan.

⁴⁵Jackson, *The World Trading System*, 1997, 60.

permitted in 1959.⁴⁶ Over time, U.S.-Japanese VER agreements expanded from narrowly defined product categories to agreements covering a diverse set of goods from tuna to kitchen utensils.⁴⁷ Several other countries, including Australia, France and the United Kingdom also concluded VERs with Japan.⁴⁸

The GATT Long-Term Arrangement Regarding International Trade in Cotton Textiles (LTA) was established in 1962. This agreement included 29 exporting and importing nations and imposed VERs on cotton textiles to the United States and several other developed countries.⁴⁹ By 1972, new VER agreements had been made that included increasingly popular man-made fibers, as well as wool, and were applied to South Korea, Taiwan, Hong Kong, and Malaysia. The GATT Multifiber Arrangement (MFA) was implemented in 1974. The MFA initially comprised approximately 40 countries, including nine developed country importers (including the United States).⁵⁰ It restricted exporters to “orderly marketing agreements,” effectively VERs, on certain textile and apparel products including cotton, certain man-made fibers, and wool. The MFA, as with VERs, provided U.S. firms with an adjustment period, enabling them to revise their production process to become more internationally competitive or to shift production to a product more in line with their comparative advantage. The MFA was renewed multiple times until it was replaced by the WTO Agreement on Textiles and Clothing (ATC), to which the United States was a party, under which textile quotas were phased out from 1995 to 2005.

Textile quotas and restraints were applied largely to benefit domestic interests in the United States and other industrialized nations although benefits also accrued to certain developing countries. For example, countries that were allocated quotas received guaranteed market access even for marginally efficient products. Quotas also provided incentives for developing countries to increase value added per unit as a way of maximizing the revenue from abroad.⁵¹

⁴⁶McClenahan, “The Growth of Voluntary Export Restraints,” 1991, 183.

⁴⁷Ibid., 184.

⁴⁸Farrell, *Japanese Investment in the World Economy*, 179.

⁴⁹The LTA was preceded by an interim measure, the GATT Short-Term Arrangement (STA), which provided terms on imports and exports of cotton textiles similar to those of the eventual LTA. The STA was drafted by representatives of 16 countries including the United States and was in effect from 1961 to 1962. USITC, *The History and Current Status of the Multifiber Arrangement*, 1978, 8-9.

⁵⁰Jackson, *The World Trading System*, 1997, 208.

⁵¹For a lengthier treatment of the effects of textiles quotas on developing countries see Keesing and Wolf, *Textile Quotas Against Developing Countries*, 1980, 122-128.

The steel industry also experienced increased competition from imports, which increased dramatically in the mid-1950s. From 1955, when imports made up 1.2 percent of the U.S. steel market, imports increased nearly fivefold to a 5.6 percent market share in 1962.⁵² The steel industry sought relief, and in 1969 a major arrangement was reached between the U.S. government and representatives of the steel industries in Japan and the EEC, wherein these industries voluntarily agreed to restrict their exports to the United States. This arrangement was expanded in 1972 to include the British steel industry,⁵³ but was eliminated a few years later when economic pressures on the steel industry eased.⁵⁴ Renewed efforts by the U.S. steel industry led to the implementation of the steel Trigger Price Mechanism (TPM) in 1977. The TPM established a minimum price for steel and treated any price below the minimum as dumping.⁵⁵ Additional VERs on steel were implemented in 1982 and 1984 and phased out in 1992.

Another set of significant export restrictions was the system of VERs for passenger vehicles exported to the United States from Japan, in place during 1981–84.⁵⁶ These VERs added significantly to the restraints already in place. Imports subject to restrictions under VERs amounted to approximately 6 percent of annual U.S. manufactured imports in 1980, a figure that, by one estimate, doubled with the implementation of passenger vehicle VERs.⁵⁷

Trade Act of 1974

By 1974, reduction of nontariff barriers had come to be seen as critical to progress in multilateral trade liberalization.⁵⁸ Two forces highlighted their importance. The first was the substantial progress that had been made in the reduction of tariffs, which in turn tended to reveal the highly restrictive nature of nontariff measures. The second was the increased use of nontariff measures, such as VERs, that were outside of the negotiating framework. The Trade Act of 1974 addressed the matter from the United

⁵² Adams and Dirlam, “Steel Imports,” 1964, 629.

⁵³ McClenahan, “The Growth of Voluntary Export Restraints,” 1991, 188.

⁵⁴ Destler notes that this was a result of both domestic economic growth and the devaluation of the dollar during this time. Destler, *American Trade Politics*, 1995, 188.

⁵⁵ Chorev, *Remaking U.S. Trade Policy*, 2007, 121.

⁵⁶ Feenstra, “Voluntary Export Restraints in U.S. Autos,” 1984, 37.

⁵⁷ Destler, *American Trade Politics*, 1995, 210.

⁵⁸ 93rd Congress, *Trade Act of 1974*, Pub. L. No. 93-618, January 3, 1975 (19 U.S.C. 2101)

States' perspective. It provided relief from injury caused by import competition and provided other adjustment assistance for workers and firms.⁵⁹ At the same time, the 1974 act reduced the overall level of trade barriers, reinstated the President's authority to negotiate tariff reductions in the Tokyo Round (1973–79), and extended trade negotiation authority to the reduction of nontariff measures, which previous trade authorization bills had not explicitly included.⁶⁰ This renewal of trade negotiating authority was similar to the 1934 RTAA (which had finally lapsed in 1962), although the 1974 act required greater consultation with Congress during the negotiating process. The 1974 act provided so-called fast track authority under which Congress agreed that if the President submitted legislation to implement a trade agreement and followed certain procedural requirements, Congress would veto or approve, but not amend, the legislation. This authority signaled the seriousness of the administration's intent when negotiating with trade partners and helped to speed up negotiations by limiting Congress's role to setting negotiating objectives and active consultation.⁶¹

To address concerns from industries about increased competition from abroad, the 1974 act relaxed the requirements for obtaining relief via various measures collectively called trade remedies. These trade remedies, as discussed below, had in some cases been available to firms since 1921.⁶² The intent of the legislation was to provide a rational framework for relief from import competition to replace what some observers claimed had become a series of exemptions for powerful industries.⁶³ Although the relaxed trade-remedy requirements enabled less-powerful industries to successfully obtain relief, industries previously receiving favored treatment continued to do so under the new legislation, and the 1974 act eased the requirements somewhat for obtaining assistance under the Trade Adjustment Assistance program.⁶⁴ The 1974 Trade Act changed the name of the U.S. Tariff Commission—initially established in 1916—to the U.S. International Trade Commission to reflect the expansion of trade issues beyond tariffs. More substantively, the legislation authorized the President

⁵⁹93rd Congress, *Trade Act of 1974*, Pub. L. No. 93-618, January 3, 1975 (19 U.S.C. 2101).

⁶⁰Destler, *American Trade Politics*, 1995, 312.

⁶¹*Ibid.*, 71.

⁶²The first, though rarely used, antidumping provision was in the Antidumping Law of 1916, 15 U.S.C. §71 et seq. The law generally thought of as the basis for current antidumping concepts is the Antidumping Act of 1921.

⁶³Destler, *American Trade Politics*, 1995, 142.

⁶⁴*Ibid.*, 140.

to retaliate against foreign import restraints via Section 301. Continued trade liberalization required a set of measures aimed at providing relief to industries that faced unfair competition from imports, and the 1974 Trade Act sought to broaden the trade remedies available to the President and U.S. industries. The remedies fall into five categories: antidumping duties, countervailing duties, section 337 of the 1930 Tariff Act (certain unfair import practices), safeguard actions (reenacted as section 201 of the 1974 Trade Act), and section 301 of the 1974 Trade Act (box 3.1).

There is debate as to the role of trade remedies in the broader trade liberalization agenda. Some scholars view trade remedy laws as a way to manage the requests for protection from vulnerable domestic industries.⁶⁵ That is, these laws enable firms to target specific goods from specific countries, reducing firms' incentives to band together to push Congress for broad-based increases in tariffs or quotas. A different perspective is that trade remedies are an alternate means of restricting trade. An examination of trade remedies broadly defined to include VERs estimates that these remedies were equivalent to a nearly 20 percent tariff on the goods in the affected industries.⁶⁶ Antidumping proceedings may also encourage foreign firms to raise their prices in U.S. markets to avoid antidumping duties, which can lead to quota rents⁶⁷ being transferred abroad at the expense of U.S. consumers.⁶⁸

Generalized System of Preferences

Another major change resulting from the 1974 act was the authorization of the U.S. Generalized System of Preferences (GSP) that permitted designated developing countries to export certain goods duty-free to the

⁶⁵See, for example, the discussions in Pearson 33, and Chorev 144.

⁶⁶De Melo and Tarr, "Welfare Costs of U.S. Quotas," 1990, 492-96. The effects estimated were derived from two sources: somewhat less than 13 percent is obtained strictly from tariff equivalents, while the extra 7 percent results from the transfer of quota rents going to other countries under VERs.

⁶⁷"Quota rents" is an economic term with the following meaning. Any quantity restriction on imports will imply that those few imports permitted into the country can be sold at a premium; this premium is known as a "quota rent." Conventional quotas on imports will see the quota rents accrue domestically, frequently to the importers; export restraints will see the quota rents accrue to foreign exporters.

⁶⁸Gallaway, Blonigen, and Flynn, "Welfare Costs of the U.S. Antidumping and Countervailing Duty Laws," 1999, 211-44. In this case, quota rents allow foreign producers to benefit from the higher prices paid by U.S. consumers. An extensive survey of the literature can be found in Blonigen and Prusa, "Antidumping," 2001.

BOX 3.1 Trade remedies

The **antidumping** provisions allow firms to seek relief from dumping (defined as selling imported products below their “fair” or “normal” value) if they are injured by the dumped imports. The determination of whether dumping is occurring is often based on a comparison of the U.S. price of the import with the home-market price, but in many cases is related to cost (specifically, cost plus a reasonable profit margin). The determination of injury by imports was transferred from the U.S. Department of Treasury to the USITC (then called the Tariff Commission) in 1954 under the Customs Simplification Act.^a

The **countervailing duty** provisions may be applied when a foreign country subsidizes exports. An injury test was introduced in the 1974 Trade Act.

Antidumping and countervailing duty laws were strengthened in both the 1974 and 1979 Trade Acts. Prior to the 1970s, neither measure had been used frequently.

Section 337 of the 1930 Tariff Act provided for relief against unfair practices in import trade particularly with respect to infringement of intellectual property rights. The authority of the USITC was strengthened in the 1974 Trade Act to ban imports or issue cease and desist orders in addition to determining violations of the law.^b

Section 201 of the 1974 Trade Act modified provisions of the existing “escape clause” mechanism. The escape clause, also known as a safeguard action, originally provided recourse for domestic industries injured by a reduction in U.S. tariff rates. The previous mechanism found in the Trade Expansion Act of 1962 had strict requirements for demonstrating injury. A specific U.S. tariff concession had to be the “major cause” of injury to an industry, meaning that the concession caused more harm than all other factors combined.^c The 1974 Trade Act relaxed this requirement. Under the new language, imports need only cause damage to the industry to a degree “not less than any other cause.”^d The act also removed the burden of linking the harm to a specific U.S. tariff concession.

United States. GATT signatories agreed to this type of program, and signed a waiver in 1971 permitting this exception to reciprocal trade concessions as embodied in the MFN clause of the GATT, in favor of nonreciprocal concessions for designated developing countries. Thereafter, most industrial countries, including the United States, introduced individual GSP programs for the benefit of developing countries.⁶⁹

⁶⁹Hoekman and Kostecki note that developing countries did not receive special treatment under the original GATT structure. Several developing countries argued at the time that they should be given special access and exemptions in order to be able to compete internationally with products from more developed countries. The Haberler Report, in 1958, was the first major initiative to discuss the needs and concerns specific to developing countries at the multinational level. Hoekman and Kostecki, *The Political Economy of the World Trading System*, 2001, 385; Keck and Low, “Special and Differential Treatment in the WTO,” 2004, 4.

BOX 3.1 Trade remedies, *continued*

Section 301 of the 1974 Act enables a company to seek a remedy against foreign trade barriers. Initially aimed at barriers to trade in goods (e.g., computers to Brazil, tobacco to Japan), section 301 was expanded in the 1979 Trade Agreements Act to include trade-related services (e.g., insurance to South Korea) and possibly exchange controls, government procurement, and import licensing.^{e,f}

Several other expansions of the scope of trade remedies occurred in the decade following the 1974 Trade Act. The 1984 Trade Remedies Reform Act expanded the reach of section 301 to cover foreign investment regulations. In 1988, section 301 was amended with “Super 301,” which required the USTR for two years to identify “priority” foreign country practices whose elimination were likely to have the most significant potential to increase U.S. exports and to initiate section 301 proceedings against foreign countries (rather than waiting for domestic firms to initiate proceedings).^g “Special 301” mandated similar actions by USTR but pertained exclusively to violations of intellectual property rights.

^aDobson, *Two Centuries of Tariffs*, 1976, 119.

^b*Ibid.*, 129.

^cDestler, *American Trade Politics*, 1995, 142.

^d*Ibid.*, 143.

^eChorev, *Remaking U.S. Trade Policy*, 2007, 135.

^fPearson, *United States Trade Policy*, 2004, 26.

^gChorev, *Remaking U.S. Trade Policy*, 2007, 136.

The motivation for the GSP evolved out of a series of multinational discussions beginning with the 1964 meeting of the United Nations Conference on Trade and Development (UNCTAD) that pushed for a special schedule of lowered tariffs on goods imported by developed countries from developing countries.⁷⁰ In 1979, during the Tokyo Round, the so-called GATT Enabling Clause formalized the idea of special and differential treatment for less-developed countries.⁷¹ The GSP was the first preference program geared specifically toward developing countries, but in subsequent years the United States implemented a series of programs targeted at assisting developing countries by providing enhanced access to U.S. markets.⁷² The primary goal of these programs, still in place today, is

⁷⁰See Jackson, *The World Trading System*, 1997, 322–23.

⁷¹Keck and Low, “Special and Differential Treatment in the WTO,” 2004, 5.

⁷²The initiatives were the Caribbean Basin Initiative (1983), the Andean Trade Preference Agreement (1991), and the African Growth and Opportunity Act (2000).

to assist the developing countries by encouraging their economic growth, although the United States benefits as well.⁷³

Addressing Nontariff Measures

A series of multilateral initiatives began in the late 1960s to counter the proliferation of nontariff measures, in particular quotas and VERs. The Kennedy Round (1964–67) was the first multilateral round to deal with nontariff measures, although its success was limited. Several agreements were reached, notably on antidumping measures and a unified method for customs valuation. However, the U.S. Congress never passed the agreements, and the agreements became voluntary. The President, according to Congress, exceeded his authority by attempting to implement the nontariff measures as an executive agreement. Congress insisted that nontariff measures negotiated during the subsequent Tokyo Round be submitted to it for final approval.⁷⁴ The main accomplishment of the Kennedy Round was a reduction in tariffs, which participating countries cut in 1967 to an average of 8.7 percent, a decrease of 35 percent.⁷⁵

The Tokyo Round (1973–79) raised the subject of nontariff measures again, and this time an agreement was reached. The agreements resulting from the Tokyo Round were in the form of so-called codes, which were agreements signed by only a subset of GATT countries—generally the OECD countries plus a few developing countries. The codes included agreements on a number of subjects: customs valuation, government procurement, import licensing procedures, subsidies and countervailing duties, antidumping duties, standards (technical barriers to trade), and a civil aircraft agreement. This time, the U.S. Congress approved the agreements without difficulty.

⁷³A body of literature seeks to quantify these benefits. Hoekman, Martin, and Braga (2006) summarize some of this literature. Dean and Wainio, in estimating the value of the preference programs for the developing countries, point out that, as trade barriers are reduced, countries that are the beneficiaries of preference programs no longer have an advantage vis-à-vis the rest of the world. However, the key question as to whether preference programs aid in integrating developing countries into the world economy has not yet been conclusively answered. Hoekman, Martin, and Braga, “Preference Erosion”, 2006, 19; Dean and Wainio, “Quantifying the Value of U.S. Tariff Preferences,” 2006.

⁷⁴Baldwin, “The Changing Nature of U.S. Trade Policy Since World War II,” 1984, 19. Jackson attributes this failure to “procedural devices engineered by domestic interests” to uphold protection for their products. Jackson, *The World Trading System*, 1997, 75.

⁷⁵*Ibid.*, 74.

TABLE 3.1 Trade-weighted average tariffs by selected regions and negotiating round

Country	Pre-Kennedy Round	Kennedy Round	Tokyo Round	Uruguay Round
Japan	7.3	4.5	2.7	1.7
United States	9.2	5.9	4.3	3.5
European Union	7.7 ^a	4.8 ^a	4.6 ^b	3.6 ^c

Source: *World Trade Report 2007*, Table 8, 209.

^aEEC6: Germany, France, Italy, the Netherlands, Belgium, and Luxembourg.

^bEEC9: EEC6 plus Denmark, Ireland, and the United Kingdom.

^cEU12: EEC9 plus Greece, Portugal, and Spain.

Nonetheless, these codes produced only limited results for nontariff barrier liberalization. In addition, an effective enforcement structure was lacking in that the codes were voluntary. Dispute settlement provisions lacked effective penalties for failure to uphold commitments. Major issues, notably textile quotas and nontariff issues pertaining to the sensitive agriculture sector, were left out of these Tokyo Round codes. Moreover, the codes did not halt the spread of VERs, as new quantitative restrictions were agreed upon shortly after the negotiations ended.

Meanwhile, tariff cuts continued apace. The Tokyo Round resulted in a decrease in average bound tariff rates of 34 percent by participating countries, with post-Tokyo Round tariffs averaging 6.3 percent in 1979.⁷⁶ Although concrete progress on nontariff barriers was limited, the Kennedy and Tokyo Rounds provided continuity of negotiations and continued the process of liberalization (table 3.1 shows tariff levels for the Kennedy, Tokyo, and Uruguay Rounds for Japan, the European Union, and the United States).

The Trade Agreements Act of 1979 further eased the requirements for obtaining relief under domestic trade remedies. The 1979 Trade Act also shifted responsibility for administering aspects of antidumping and countervailing duty law (shared with the USITC) from the U.S. Department of the Treasury to the Department of Commerce.⁷⁷ In addition, the act added a requirement of an injury test to most countervailing duty investigations and established streamlined procedures for both the Commerce Department and the USITC to complete preliminary and final investigations much more rapidly than had been the case previously.

⁷⁶Jackson, *The World Trading System*, 1997, 74.

⁷⁷USITC, *Antidumping and Countervailing Duty Handbook*, 2008.

The 1988 Omnibus Trade and Competitiveness Act established the U.S. negotiating objectives for the Uruguay Round. Its overarching objectives were the reciprocal lowering of trade barriers and other trade distortions and an improved system of dispute settlement. Specific objectives were detailed in areas such as agriculture, services, intellectual property, and foreign direct investment.⁷⁸ Another key component of the 1988 act was an amendment to section 301 of the Trade Act of 1974 (see box 3.1 for details). The 1988 act sought to increase exports via a set of domestic measures including promotion of technological competitiveness. The act also promoted competitiveness in technology (e.g. federal research programs in semiconductor and other advanced manufacturing technologies) and expanded adjustment assistance for workers in industries adversely affected by increased imports.

The World Trade Organization and the Proliferation of Free Trade Agreements (since 1989)

The era since 1989 has been marked by several initiatives to revitalize trade negotiations. During this period, the United States committed to multiple agreements and focused on expanding the reach of trade negotiations into sensitive and technically difficult areas. The agreements implementing the results of the Uruguay Round of multilateral trade negotiations and establishing the World Trade Organization were signed in 1993. The United States also signed a string of bilateral and regional agreements, including the politically and economically significant North American Free Trade Agreement.

The economic backdrop of these agreements was the increasingly globalized nature of trade. During the 1980s, worldwide exports grew on average 68 percent faster than global GDP, and in the 1990s, exports grew nearly 140 percent faster than global GDP.⁷⁹ Improvements in transportation and communications, in addition to lower policy barriers, have expanded trade in goods (and increasingly in services) and facilitated the creation of widely dispersed production networks.⁸⁰ Partly as a result of these lower trade costs and improved communication, firms began to break

⁷⁸Omnibus Trade and Competitiveness Act of 1988, Pub. L. No. 100-418.

⁷⁹World Bank, World Development Indicators Online.

⁸⁰Feenstra provides a summary of the recent growth in international trade as well as a detailed analysis of changes in international production methods. Feenstra, "Integration of Trade," 1998.

apart their production processes and distribute them around the world. Companies sourced and produced parts internationally according to where the item could be made at a better quality or at a lower cost. This growing trade in intermediate goods contributed to trade expanding more rapidly than GDP and increased the number of players having a vested interest in lower trade barriers.⁸¹ Additionally, technical improvements permitted previously nontradable services to become increasingly traded.⁸² Trade liberalization in this era saw a resurgence in the use of bilateral and regional agreements, which contrasted with the prior era's emphasis on multilateral, GATT-based negotiations. The GATT (primarily via Article XXIV of GATT 1994) permits regional agreements provided that the countries adhere to certain conditions, such as a commitment not to increase duties between the regional trade area and other WTO members. An extensive body of literature debates whether free trade agreements (either regional or bilateral) have had a beneficial effect on global trade.⁸³ One branch of this literature⁸⁴ argues that regional trade works against the drive for global integration because it undermines the motivation to reduce barriers to all countries and increases trade diversion.⁸⁵ Another branch of the trade literature argues that regional trade blocs are a way of moving forward in trade liberalization when multilateral negotiations are temporarily blocked. Regional or bilateral trade agreements could persuade recalcitrant WTO members to reengage and are a forum to test ideas on new areas of trade liberalization.

⁸¹Barton et al., *The Evolution of the Trade Regime*, 2006, 124.

⁸²Prime examples are technical developments in information technology that allow for the tradability of software development and call centers.

⁸³A detailed exposition of this literature is found in Feenstra, *Advanced International Trade*, 2004, 175–208. A less formal discussion appears in Krugman and Obstfeld, *International Economics*, 2000, 241–45.

⁸⁴Krueger, “Are Preferential Trade Arrangements Trade-Liberalizing or Protectionist?” 1999, provides a synthesis of the two sides; see Bhagwati, Krishna, and Panagariya, *Trading Blocs*, 1999, for a discussion regarding the issues brought about by free trade agreements; and Baldwin, “The Causes of Regionalism,” 1997, for a counterpoint.

⁸⁵If the United States applies uniform tariffs to all countries, it will import an item from the most efficient producer. However if it lowers tariffs through a free trade agreement to a country that is not an efficient producer, imports from that country will increase at the expense of those from the efficient producer. This is called trade diversion.

Trade Agreements in North America

The U.S.-Canada Free Trade Agreement, which entered into force in 1989, was an important milestone in U.S. trade policy.⁸⁶ It signaled a renewed U.S. interest in bilateral or regional free trade agreements, one that had been largely absent from the trade policy agenda since the pre-World War II accords.⁸⁷ Moreover, it implemented certain innovations, such as liberalization of financial services and a dispute-settlement process, ahead of the Uruguay Round negotiations. The agreement emerged from Canada's interest in greater access to the U.S. market and both countries' frustration with the multilateral process. It was hoped that the agreement would spur the international community to a resolution of the Uruguay Round.⁸⁸ The U.S.-Canada agreement was formalized between the two countries while talks were still ongoing at the multilateral level.

Soon after the U.S.-Canada Free Trade Agreement was signed, and partly as a consequence, Mexico approached the United States for a similar accord.⁸⁹ As a result, the North American Free Trade Agreement (NAFTA), comprising the United States, Canada, and Mexico, was signed and entered into force in 1994.⁹⁰ In many cases, tariffs on goods trade between NAFTA countries were lifted immediately, and others were gradually phased out. For example, U.S. restrictions on imports of sugar were phased out over 15 years; Mexico received a tariff-free quota allocation, which increased incrementally, and all restrictions on sugar were finally eliminated at the beginning of 2008.⁹¹

At the same time, Mexico lowered its barriers to U.S. agricultural products, reduced its restrictions on imports of automobiles, and applied

⁸⁶A prior agreement, the 1965 U.S.-Canadian Automobile Agreement, was significant. It provided reciprocal duty-free access for newly manufactured automobiles and related parts between the United States and Canada. To qualify for duty-free treatment, North American content of the automobiles had to be at least 50 percent, and Canada imposed certain additional restrictions on manufacturers to ensure a minimum level of domestic production. Helmers, *The United States-Canadian Automobile Agreement*, 1967.

⁸⁷The United States did sign two free trade agreements, with Israel in 1985 and with Jordan in 2000 in which political considerations predominated, according to Rosen, "Free Trade Agreements as Foreign Policy," 2004, 53–55.

⁸⁸Pearson, *United States Trade Policy*, 2004, 108.

⁸⁹Destler, *American Trade Politics*, 1995, 135.

⁹⁰The NAFTA Implementation Act was submitted to Congress on November 4, 1993. U.S. House of Representatives, Committee on Ways and Means, *Overview and Compilation of U.S. Trade Statutes*, 1995 ed., 199.

⁹¹Hearing transcript, January 8, 2009, 13 (testimony of Thomas Earley, Sweetener Users Association).

national treatment rules to foreign direct investment from the United States and Canada in services such as telecommunications and finance.⁹² To prevent circumvention of existing tariffs by other countries, the U.S. automobile and textile industries secured rules of origin requirements⁹³ for their products.⁹⁴ The rules of origin requirements for automobiles, for example, required that 62.5 percent of a car's production cost (calculated according to specific formulas set out in the agreement) be produced within the free trade area to qualify for tariff-free entry into the United States.⁹⁵

Within the United States, environmental organizations and organized labor strongly opposed NAFTA.⁹⁶ Provisions safeguarding the interests of labor and the environment were not incorporated into the main agreement. To address the opposition, the Clinton administration negotiated side agreements on the environment, workers' rights, and safeguards against import surges that were ultimately approved by Congress.

The Uruguay Round

Simultaneous with negotiations of the U.S.-Canada FTA and NAFTA, the United States also participated in trade negotiations in the Uruguay Round (1986-93).⁹⁷ The Uruguay Round agreement was concluded in late 1993 and entered into force in January 1995. It is generally considered to have been a highly beneficial agreement for the United States. This was particularly true for the agreements on services and intellectual property rights protection. U.S. negotiators, as well as observers, felt that it was

⁹²Barton et al., *The Evolution of the Trade Regime*, 2006, 165.

⁹³Rules of origin requirements pertain to where a product is made and are important for trade statistics and trade agreements. Because raw materials and parts may originate from many points, determination of origin is not straightforward. Rules of origin requirements in a free trade agreement may grant preferential tariff treatment to goods made wholly or in part in the beneficiary country or group of countries.

⁹⁴Destler, *American Trade Politics*, 1995, 219.

⁹⁵*Ibid.*, 227.

⁹⁶In addition to these well defined groups, there was a more general trepidation about NAFTA; large segments of the middle class were worried by NAFTA's potential effect on jobs. Destler, *American Trade Politics*, 1995, 223. This was manifested most strongly by Ross Perot's surprising third-party candidacy in the 1992 presidential elections.

⁹⁷The Omnibus Trade and Competitiveness Act of 1988 provided the President with the authority to enter into trade agreements before June 1, 1993, subject to implementation under special "fast track" Congressional approval procedures. U.S. House of Representatives, Committee on Ways and Means, *Overview and Compilation of U.S. Trade Statutes*, 1993 ed., 162.

in the interest of the United States to open foreign markets for services as it had a comparative advantage in several services sectors⁹⁸ and had significant growth potential in the export of services trade, particularly in the areas that employed highly skilled labor.⁹⁹ The lack of intellectual property rights abroad prior to the Uruguay Round was estimated to be very costly to the United States; by one estimate, U.S. firms lost revenues of \$23.8 billion due to inadequate intellectual property rights protection.¹⁰⁰

In addition to another round of tariff cuts, which reduced industrialized country tariffs by 38 percent,¹⁰¹ the Uruguay Round extended prior gains in certain nontariff measures and expanded the range of topics negotiated in a multilateral setting, most significantly trade in services and certain politically sensitive domestic regulatory issues. The Uruguay Round also established more robust multilateral administrative structures for negotiations and trade policy review, and its dispute resolution system provided a stronger enforcement mechanism.

The Uruguay Round's most obvious structural achievement was the establishment of the WTO (in the Marrakech Agreement of 1994), a formal international organization that took the place of the ad hoc GATT administration that had been set up after it had become clear that the ITO agreement would not be implemented.¹⁰²

The second accomplishment of the Uruguay Round was the consolidation of the gains from prior rounds of negotiation.¹⁰³ New tariff bindings were added. Most of the voluntary codes of the Tokyo Round (rules on import licensing; antidumping duties, subsidies, and countervailing measures; customs valuation methods; and standards on health, safety, and

⁹⁸Hoekman and Kostecki, *The Political Economy of the World Trading System*, 237.

⁹⁹Congressional Budget Office, *The GATT Negotiations and U.S. Trade Policy*, 1987, 17.

¹⁰⁰USITC, *Foreign Protection of Intellectual Property Rights and the Effect on U.S. Industry and Trade*, 1988, 4-3.

¹⁰¹Jackson, *The World Trading System*, 1997, 74.

¹⁰²Countries were no longer able to "opt out" of agreements with which they did not agree, as was the case during the Tokyo Round negotiations for nontariff measures. On the other hand, the possibility that fewer agreements will be reached is greater because an agreement requires a commitment by each member. Hoekman and Kostecki, *The Political Economy of the World Trading System*, 2001, 1.

¹⁰³A detailed explanation of the WTO and the GATT in the context of the WTO is found in Hoekman and Kostecki, *The Political Economy of the World Trading System*, 2001, 9-73. The following discussion summarizes some of their main points.

consumer protection, among others) were amended, incorporated into the main body of the agreement, and made mandatory.¹⁰⁴

The Uruguay Round also provided for the phase out, over a 10-year period, of quotas on textiles and apparel, nearly half a century after a framework for their imposition was first implemented. The ATC, which replaced the MFA, phased out the textile quota system in four stages: by 16 percent (by volume of imports) upon entry into force of the agreement, by an additional 17 percent within the first three years, a further 18 percent within seven years, and the rest by 2005. The agreement did not, however, mandate lowering tariffs on textiles and apparel.¹⁰⁵

Finally, the scope of negotiations was expanded. This included major strides forward on trade liberalization with the General Agreement on Trade in Services (GATS), the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS), Trade Related Investment Measures (TRIMs), and the Agreement on Agriculture. Each of these broke new topical ground at the multilateral level and increased the reach of trade negotiations beyond the borders of countries and into their domestic governance structure.

The GATS addressed, for the first time in a multilateral setting, the opening of trade in services. Services present a unique set of challenges to trade negotiators, as their nonphysical and highly heterogeneous nature makes them more difficult than goods to count and assess for tariffs.¹⁰⁶ The obligations, subscribed to by all members, extended MFN principles to services, with temporary exceptions made for preexisting free trade agreements. In addition, member countries subscribed to sector-specific commitments, separated into national treatment and market access commitments. National treatment requires countries to treat foreign and domestic firms equally under the law. Market access requires countries to permit both domestic and foreign firms to compete in a market. Restricted

¹⁰⁴ A few of the Tokyo Round codes were appended as plurilateral agreements; that is, they remained binding only on those that had previously committed to them. These were in the areas of government procurement, civil aircraft, select bovine products, and milk products. The agreements on the latter two were terminated in 1997 and are now covered by the Sanitary and Phytosanitary agreement. WTO, "Sanitary and Phytosanitary Measures," undated (accessed December 9, 2008).

¹⁰⁵ The sector reportedly continues to face high U.S. import tariffs and complex rules of origin requirements. USITC, Hearing transcript, January 8, 2009, 7 (testimony of Brenda Jacobs, Esquire, Sidley Austin LLP on behalf of U.S. Association of Importers of Textiles and Apparel).

¹⁰⁶ Hoekman, "Liberalizing Trade in Services," 2006, 10–12.

market access tends to be a particular problem in services, as it includes sectors such as telecommunications and transportation that are frequently monopolies or restricted to a few firms.

The TRIPS Agreement dealt with intellectual property rights, the first time the international community sought to require governments to enforce international laws regarding intellectual property.¹⁰⁷ The agreement included protection of copyrights, trademarks, patents, geographic indicators and certain other trade secrets.

TRIMs extended to foreign direct investment the GATT principle of national treatment of goods and the GATT rules limiting the use of quantitative restrictions.¹⁰⁸ Resistance to addressing investment measures meant that the resulting agreement was limited to rules on foreign investment in the manufacture of goods, rather than including broader commitments on investment in services.¹⁰⁹

The Agreement on Agriculture addressed, among other issues, subsidies and quotas on agricultural goods. Developed countries committed to reduce export subsidies by 21 percent by volume and 36 percent by value by 2000, while developing countries committed to reductions of 14 percent by volume and 24 percent by value by 2004. Developed countries also agreed to expand market access by 36 percent by 2000, while developing countries committed to expand market access by 15 percent by 2000. Nontariff measures, including quotas, were converted into equivalent tariffs, and the United States and other countries introduced two-tiered tariff rate quotas (TRQs) that allowed limited imports at low tariff rates and unlimited imports at higher rates. The point where the high tariff is first applied is referred to as the quota point, and the TRQs are usually designed so that only minimal imports enter at the high rate.¹¹⁰

Domestically, the Uruguay Round agreement proved less controversial for the United States than NAFTA for several reasons. First, although the structure was different, the legal implications—in particular, sovereignty over trade issues—were not materially more onerous than the prior GATT commitments.¹¹¹ Second, much of the new agreement, such as the

¹⁰⁷Ibid., 126.

¹⁰⁸Hoekman and Kostecki, *The Political Economy of the World Trading System*, 2001, 202.

¹⁰⁹Ibid., 202–03; also found in the WTO TRIMs Agreement.

¹¹⁰WTO, “Agriculture: Fairer Markets for Farmers,” undated (accessed January 2, 2009).

¹¹¹Hoekman and Kostecki, *The Political Economy of the World Trading System*, 2001, 49.

intellectual property and services agreements, was perceived to benefit the United States. The arrangement on intellectual property in particular was instrumental in obtaining U.S. support for the Uruguay Round, and industry groups reliant on intellectual property protection—pharmaceuticals, software, semiconductors, and entertainment, in particular—were very supportive.¹¹² Labor and environmental groups remained opposed, but this time free-trade supporters were more numerous and vocal than with NAFTA. Third, the round created a binding dispute settlement system, which was especially important to the United States. The Uruguay Round Agreements Act passed the U.S. Congress and entered into force one year after NAFTA, in January 1995.

Fast track authority lapsed in 1993; the ensuing decade saw only the U.S.-Jordan FTA signed into law in 2001. Fast track authority was renewed under the name trade promotion authority in the Trade Act of 2002, when language about the importance of labor and environmental standards was placed in the act as a result of the debate over these issues that arose during the approval of NAFTA.¹¹³ Under trade promotion authority of the Trade Act of 2002, President Bush signed into law eight bilateral trade agreements and a regional free trade agreement with Central American countries (table 3.2). Trade promotion authority expired in 2007 and has not been reauthorized at the time of this report.¹¹⁴

The Doha Development Agenda

The current round of multilateral negotiations, the Doha Development Agenda (DDA or “Doha Round”) remains unfinished. The DDA was initiated at the Fourth Ministerial Conference of the World Trade Organization in 2001. The declared development objectives, as suggested by its title, and the prominent role taken by developing countries are the new features of this round of negotiations.¹¹⁵ Many developing countries believe that the Uruguay Round disproportionately benefited the developed world.¹¹⁶ Developing countries believed that the issue of subsidized agricultural commodities in developed countries, which compete with exports from

¹¹²Chorev, *Remaking U.S. Trade Policy*, 2007, 159.

¹¹³*Ibid.*, 185.

¹¹⁴See table F.1 for details on the successfully concluded agreements and their economic effects.

¹¹⁵Hoekman, “Strengthening the Global Trade Architecture,” 2002, 13.

¹¹⁶Mehta, “The Doha Development Agenda,” 2003, 11.

TABLE 3.2 Free trade agreements, proposed and implemented

Entered into Force	Agreement	Status ^a
1985	US-Israel	Implemented
1989	US-Canada	Subsumed into NAFTA
1994	NAFTA (US-Canada-Mexico)	Implemented
2001	US-Jordan	Implemented
2004	US-Singapore	Implemented
2005	US-Chile	Implemented
2005	US-Australia	Implemented
2006	US-Morocco	Implemented
2006	CAFTA-DR (US-Dominican Republic-Central America)	Implemented
n.a.	Free Trade Area of the Americas (Western Hemisphere)	Negotiations (2001)
n.a.	US-South Africa Customs Union (US-South Africa-Namibia-Lesotho-Botswana-Swaziland)	Negotiations (2003)
2006	US-Bahrain	Implemented
n.a.	US-Thailand	Negotiations (2006)
n.a.	US-Colombia	Signed, Pending legislation (2007)
2009	US-Peru	Implemented
n.a.	US-Ecuador	Negotiations (2006)
n.a.	US-Panama	Signed, Pending legislation (2006)
n.a.	US-Republic of Korea	Signed, Pending legislation (2007)
n.a.	US-UAE	Negotiations (2007)
2009	US-Oman	Implemented
n.a.	US-Malaysia	Negotiations ongoing (negotiations begun 2005)
n.a.	Trans-Pacific SEP (US-Singapore-Chile-Brunei-New Zealand)	Negotiations planned

Sources: *Washington Trade Daily*, "U.S. Certifies Peru FTA," January 19, 2009; U.S. Trade Representative web site. <http://www.ustr.gov> (accessed February 2, 2009).

^aDates refer to date of last negotiation unless otherwise specified

developing countries, had not been adequately addressed. Further, they were concerned that the TRIPS agreement on intellectual property affected their access to affordable drugs for HIV/AIDS, malaria, tuberculosis, and other diseases. Additionally, many technical aspects of the Uruguay Round commitments proved burdensome to developing countries whose human and financial resources are limited.¹¹⁷

In addition to these overarching issues, participants agreed in the Doha Declaration to review a number of WTO provisions that pose frequent problems for the developing and least developed countries: issues

¹¹⁷Oyejide, "Interests and Options of Developing and Least-developed Countries," 2000, 8.

concerning trade, debt, and finance; trade and the transfer of technology; technical cooperation and capacity building; and WTO provisions concerning special and differential treatment.

Negotiations in the DDA reached an impasse in July 2008; the proximate cause was a stalemate over special safeguards on agricultural imports between a group including India, China, and other developing countries and another group composed primarily of developed countries.¹¹⁸ The proposal on offer included a provision for a tariff increase of up to 15 percent for an import “surge” (defined as a 40 percent increase in imports over the average of the previous three years). The tariff was to be applicable to only 2.5 percent of tariff lines. Developing countries countered with an offer of a 30 percent tariff increase on up to 7 percent of tariff lines.¹¹⁹ The issue could not be resolved, and negotiations were eventually suspended.

The Economic Effects of Trade Liberalization

This section summarizes the existing economic literature on trade with an emphasis on the quantitative assessments of trade policy over time. This literature suggests that the benefits of trade liberalization have been significant, although the size of the gains and the methods of analysis have changed over time.

In the early years, both trade negotiations and the economic analysis of trade policies focused heavily on tariffs, with minimal emphasis on nontariff barriers. There is general agreement in the economic literature that the United States benefited as tariff barriers were lowered. Gains from trade were greater than the costs even after taking into consideration the losses experienced by import-competing segments of the economy. The Tokyo Round (1973–79) was the first round to produce agreements on nontariff measures. Economic analysis during this period took on the new task of attempting to compute the effects of these less easily quantified reductions in nontariff measures. To the extent that researchers have been able to quantify these effects, their results suggest a significant increase in welfare, compared with tariff-only liberalization.

The economic literature on trade has evolved at least as much as the subject it examines. At the beginning of the period under examination, the

¹¹⁸Baldwin, “Resolving the Conflict,” September 25, 2008.

¹¹⁹The proposal details are cited in Baldwin, “Resolving the Conflict,” 2008.

economic literature was confined to highly abstract representations of the economy and had put forth only a limited number of theories to explain patterns of international trade. The lack of detail meant that quantitative assessments of trade policy were at best suggestive; indeed there were few attempts at quantitative analysis. In contrast, models in the current era can be enormous, complex, and require more computational power than was previously available.

This evolution in the literature has been driven by a number of trends. First, the economic literature pertaining to trade was relatively underdeveloped in 1934; formal mathematical analysis in the field was not the norm. Second, even if theories were articulated in a mathematical framework, models remained simple and had to be solved analytically rather than computationally, which limited the number of details that could be addressed. Over time computing power grew, and economists took advantage by constructing more computationally intensive models with many sectors and goods. The economic literature also responded to new observations in the trade data. For example, early theory suggested that a country would export those goods that it produces most efficiently and import those that it produces least efficiently. However, trade data showed that countries import and export the same types of goods. For instance, the United States both imports and exports automobiles. New hypotheses were posited to explain this behavior. Finally, the literature evolved to address issues of trade policy. For example, the Tokyo Round (1973–79) was the first round to include nontariff measures, and contemporary economists took on the task of estimating the effects of policy changes in nontariff barriers.

International trade is a dynamic field of research, and recently there has been a considerable increase in theoretical work. Theories are still being tested and modified, and researchers are grappling with technical issues that arise when applying theories to obtain quantitative results. For example, the theory of product variety proposes that individuals have preferences for a large number of goods and that the improved access to variety made possible by increased trade improves welfare. Applying these ideas requires determining (or assuming) a great deal about individuals' preferences for a large number of goods (i.e. elasticities of substitution across goods).¹²⁰ Yet, controversy and uncertainty about the details of the approach remain. Another difficulty faced by researchers, one that is

¹²⁰This has been the subject of some recent research. See, for example, Broda and Weinstein, "Globalization and the Gains from Variety," 2006.

particularly problematic for the analysis of services, is the lack of adequate data.¹²¹ The following section is divided into two parts. The first briefly summarizes the types of assumptions and explanations currently prevalent in economic analysis. The second part proceeds chronologically through the empirical literature and summarizes the findings.

Approaches in the Literature

Evaluating trade policies requires that assumptions be made regarding the channels through which these policies affect the economy, as well as assumptions regarding the underlying economy itself. The assumptions selected can have significant consequences on the quantitative assessment of trade policy. For example, current estimates of the U.S. welfare effects of trade liberalization vary widely, from a fraction of a percent of GDP to as much as 13 percent, depending on the treatment of services, nontariff measures and other modeling specifications.

Table 3.3 provides some examples of these assumptions and approaches and their effects on welfare outcomes. A note of caution must be sounded regarding this table in that it should be seen as a rule of thumb only. The effects of the assumptions and approaches on welfare gains do indeed reflect the results of the majority of empirical studies; however, not all studies fall in line with these generalizations. Until recently, applied trade policy analysis was concentrated on elements of the left-hand column of table 3.3, which led to relatively modest estimates of gains from liberalization. As new models gain acceptance, assumptions from the right-hand column are increasingly being used. These tend to result in relatively larger gains from trade liberalization although newer models and techniques do not universally show greater effects from trade liberalization. More practically but equally important, estimates change as computing power and data availability improve. As a result of these changing factors, comparing model results across time periods can be difficult unless those factors are controlled for.

Partial versus full liberalization. Full liberalization, the elimination of all trade barriers, is rarely if ever achieved in practice, but it is sometimes used in quantitative analysis in order to compare policies or countries'

¹²¹See, for example, Francois, Hoekman, and Woerz, "Does Gravity Apply to Intangibles?" 2007.

TABLE 3.3 A sample of modeling assumptions and approaches

	Effect:			
	Fewer welfare gains		More welfare gains	
Assumptions and approaches:	Partial liberalization	→	Full liberalization	
	Static	→	Dynamic	
	Goods only	→	Goods and services	
	Tariffs only	→	Tariffs and nontariff measures	
	Low product variety	→	High product variety	
	Constant returns to scale	→	Increasing returns to scale	

Source: Formulated by Commission staff.

Note: The labels “fewer” and “more” welfare gains only denote the general tendency of these assumptions’ impact on welfare. Conceivably the reverse could occur; however, most trade literature is in line with the relationships articulated in this table.

responses to a particular policy. Partial liberalization is often used to model the effects of particular trade agreements or trade in a particular sector.

Static versus dynamic modeling. A large share of empirical work is static, rather than dynamic. As such, it estimates the effect on economic variables during a single period of time. Although some issues can realistically be examined in a static framework, it assumes perhaps unrealistically that capital investments can be set up and disassembled instantaneously. Models for evaluating trade policy increasingly incorporate dynamic elements and are better able to handle issues related to capital stock, investment, savings, and growth.

Goods only versus goods and services; tariffs only versus tariffs and nontariff measures. As mentioned in the introduction to this section, early literature and early trade negotiations focused on goods and on tariffs on these goods. As trade policy negotiations were broadened to include services and nontariff measures, these issues have been increasingly incorporated into the economic analysis.

Product variety and returns to scale. These assumptions refer to relatively recent advances in trade theory, which are explained in box 3.2 along with a description of several other channels of the effects of trade liberalization. Over time the economic literature has developed diverse explanations of the observed patterns of international trade and how, in turn, changes in trade affect the domestic economy.

Survey of Economic Literature

Examining the literature chronologically, three major periods emerge: the pre-Tokyo Round literature, the early computational literature, and the recent complex and computationally intensive literature. The first is primarily based on small models applying the classic gains from trade (or comparative advantage) literature to the liberalization questions of the time. With some exceptions, the literature tends to apply theory to contemporaneous problems rather than examining issues retrospectively.¹²² The second era saw the development of large-scale computer models with detailed modeling of country- and sector-specific attributes. The third wave of literature combines the computational approaches with increasing innovation in the economic literature of the channels through which trade liberalization affects economies. Further, it increasingly incorporates liberalization of the services sector. Box 3.3 explains some key issues related to tariff data upon which many studies are based.

There are two general approaches to applied economic policy analysis. The first is simulation of proposed changes in trade policy (often using computable general equilibrium models), while the other involves econometrically estimating a set of variables from historical or current data to explain changes in trade. The approaches are not exclusive, as the parameters of a simulation model may be estimated econometrically, or work that is primarily econometric could be based on a model that is used for simulations.

Early Literature

There are only a few quantitative assessments of the effects of trade barriers before World War II. Indeed, quantitative assessments remain scarce until the Kennedy Round (1964–67) for the reasons outlined in the introduction to this section. The findings of these quantitative studies vary substantially and are only suggestive of the effects of trade liberalization.

Irwin quantitatively examined tariff liberalization and its welfare effects from the Civil War through 1961, just prior to the Kennedy Round.¹²³

¹²²Even with an ambitious researcher applying current methods to prior periods, newer methods are frequently more data-intensive and require data that were not collected in prior eras.

¹²³Irwin, “Trade Restrictiveness,” 2007.

BOX 3.2 Channels of the effects of trade liberalization

The theoretical literature forms the underpinnings of applied work. It also shows the number of channels through which trade (and by extension trade barriers) affects an economy, including gains from trade, demand for variety, and productivity improvements.

The classical benefits from trade liberalization result from comparative advantage, first articulated by David Ricardo in the early 19th century. In a two-good, two-country model, the idea that a country that can produce a good with fewer resources or at a lower cost than another country will gain from specializing in the export of that commodity is fairly intuitive. However, two countries can still both gain from trade even when one of the countries can produce both goods more efficiently than the other country, if one of the countries produces one of the goods more efficiently than the other good. Ricardo's explanation was based on differences in technology, which allow one country to produce a certain good more efficiently than the other country. Similar results can be obtained when two countries have different factor endowments (i.e., land, labor, and capital).^a

Recent work has built upon this foundation. The newer work takes the fundamental principle of Ricardo, the differences in technology across countries, and generalizes it to a multicountry model with a more general structure encompassing differences in technology across countries.^b

Krugman introduced a different line of research, which analyzed the trade benefits that are achieved through greater variety. He noted that an individual obtains greater enjoyment from consuming a variety of, say, different automobiles than being confined to domestically produced varieties, even when the total quantity of automobiles purchased remains the same.^c In this model, countries are assumed to produce different varieties of goods; therefore, even two countries with the same endowments and technology will want to trade with each other, unlike in the earlier, classical benefits literature. This provides an explanation for the prevalence of intra-industry trade, for example why the United States both imports and exports fruit. Individuals in both countries benefit both from lower prices and from an increase in the available varieties of products.^d

Trade liberalization can also improve a country's welfare by increasing firm productivity. This can occur in a variety of ways. One such way is via technological diffusion, the movement of technological know-how across borders in a way that benefits the importing country. This may occur directly via a transfer of research and development from one country to another, as in Grossman and Helpman.^e Alternatively, as in Eaton and Kortum,^f the technological know-how may be embodied in intermediate and capital goods that are imported from abroad and then used to produce another good domestically.

BOX 3.2 Channels of the effects of trade liberalization, *continued*

Broader-based productivity gains may result from trade liberalization. A set of papers, originating with Melitz,⁹ deals with productivity in the face of competition. When a country has many firms, each with its own level of productivity, the papers hypothesize that the least-productive ones will go out of business when the country opens itself up to foreign competition. Domestic productivity, as an average of the remaining firms, rises as a result, although there will be some negative distributional effects for the firms that go out of business.

Another productivity improvement can be seen through increasing-returns-to-scale firms (or firms that require very large markets to operate efficiently). Certain industries (for example, aircraft manufacturing) have enormous start-up costs, and such industries require large markets to recoup their investment. Reducing trade barriers allows such firms to access international markets and sell more products, thereby increasing the firms' per-unit productivity. Although unusual, potential negative effects could occur, for example if such a firm overtakes a foreign market, drives out local firms, and then uses its monopoly power to raise prices and lower production.

Another potential benefit of trade liberalization is the procompetitive effect. When a firm within a country has monopoly power, it will choose to sell fewer goods at premium prices. The result is a loss in welfare to the country as a whole, although the monopoly itself gains. Opening up to trade will allow competition into the industry and force the domestic firm to behave in a more competitive manner, improving the country's overall welfare.

^aMore detailed explanations of this literature can be found in textbooks on international economics; for example, Caves, Frankel, and Jones, *World Trade and Payments*, 2002; and Krugman, "Ricardo's Difficult Idea," 1996 (accessed April 20, 2009).

^bEaton and Kortum "Technology, Geography, and Trade," 2002.

^cKrugman, "Increasing Returns," 1979; Krugman, "Scale Economies," 1980.

^dThis is obtained from the assumptions in the paper regarding increasing returns to scale and monopolistic competition.

^eGrossman and Helpman, "Technology and Trade," 1995.

^fEaton and Kortum, "Trade in Capital Goods," 2001.

^gMelitz, "The Impact of Trade," 2003.

BOX 3.3 Summary statistics for tariffs

Assessing the size of tariff barriers can be done in a variety of ways. Many statistics have been created to summarize the size of tariff barriers, each with its own strengths and weaknesses. A trade-weighted average takes the average of all tariff rates imposed on imports, weighted by the value of the goods imported in each category. The advantage of this measure is that it gives the precise amount of tariffs actually collected and correctly accounts for high-value items. The disadvantage is that prohibitively high tariffs will not be recorded by the measure because no goods subject to that tariff will be traded. Trade in goods with high tariffs will be limited and therefore result in an underrepresentation of the degree of restrictiveness.

Simple average tariffs take the unweighted average of all tariffs. The advantage is that changes in policy will be reflected in changes in the index; the disadvantage is that changes to a low-volume good with a small economic impact will have the same effect as changes to a high-volume good with significant effects on the economy.

Anderson and Neary propose an explicitly welfare-driven measure, the Trade Restrictiveness Index (TRI).^a The TRI is a direct computation of the effect on welfare of import tariffs in a general equilibrium framework. They compute the loss of welfare from current tariff levels and then compute the uniform tariff equivalent—the tariff rate that would need to be applied uniformly to all goods in order to obtain the same welfare loss. This has the advantage of being the correct theoretical measure to examine, but it is computationally intensive to calculate and relies on various model assumptions, including elasticities of substitution among goods.

Finally, there is a range of rates that may be used. GATT and WTO negotiations center on “bound rates” for tariff lines, which are the upper bounds for tariffs that have been committed to by a country. A country may choose to levy a tariff rate below the bound rate—the “applied rate”—but not above it. A tariff average based on bound rates is useful for measuring progress in negotiations, whereas the applied rate is more useful for quantifying effects on an economy.

^aAnderson and Neary, “A New Approach to Measuring Trade Policy,” 1996.

TABLE 3.4 Pre-Tokyo Round studies

Author (date published)	Focus country	Estimated effects (% of GNP)	Remarks
Stern (1964)	United States	< 0.11	Efficiency gains from the removal of all U.S. tariffs in 1960 (ignoring the terms of trade effects)
Balassa and Kreinin (1967)	Several industrial countries	< 1.0	Gains from Kennedy Round tariff cuts
Magee (1972)	United States	1.0	Gains from removing all trade barriers (ignoring the terms of trade effects)

Source: Panagariya, "Alternative Approaches to Measuring the Cost of Protection," table 1, 2002, 5.

This paper computed the restrictiveness of existing tariffs and estimated the resulting effects on welfare for the entire time period. Irwin found that U.S. tariffs were equivalent to an across-the-board tariff of 32.2 percent in 1934. From this high rate, the index fell steadily over the years to 12.5 percent in 1961, a drop of nearly two-thirds. Irwin estimated that welfare losses imposed by even the highest tariffs were modest; even in 1934, the loss was less than 1 percent (0.21) of GDP because the share of international trade in the overall U.S. economy was low.¹²⁴ This welfare loss decreased to 0.04 percent of GDP in 1961. As noted, these are single-period static effects based on classical gains from trade.

Panagariya provided a summary of several other papers that estimate the negative effects of trade barriers on GNP during this period (table 3.4).¹²⁵ The researchers modeled only a small number of goods and generally assumed a small open economy (that is, an economy whose imports or exports are not large enough to affect prices). The welfare gains derived from assumptions of differences in technology, initial endowments, or demand for goods.

Tokyo Round and Computational Models

In the 1970s, computational power became more available for intensive, detailed calculations. In this era, researchers began using large scale CGE models (box 3.4). Beginning with the Tokyo Round (1973–79), the

¹²⁴Ibid., 2.

¹²⁵Panagariya, "Alternative Approaches to Measuring the Cost of Protection," 2002.

TABLE 3.5 Tokyo Round studies

Author (date published)	Year studied	Economic effects (% of GNP)	Remarks
Baldwin et al. (1980)	1967	0.01	50 percent multilateral tariff cut
Cline et al. (1978)	1974	0.03	60 percent agriculture NTM
Deardorff and Stern (1979)	1976	0.04	Tokyo Round tariff cut
Deardorff and Stern (1979)	1976	0.06	Tokyo Round tariff and NTM cut
Deardorff and Stern (1981)	1976	0.02–0.05	Tokyo Round tariff and NTM cut
Whalley and Wigle (1982)	1977	-0.05	50 percent multilateral tariff cut

Source: Panagariya, "Alternative Approaches to Measuring the Cost of Protection," table 1, 2002, 5.

economic literature began to focus in earnest on obtaining quantitative estimates of the effects of negotiated tariff reductions. In addition to tariff barriers, two other areas became the focus of quantitative analysis during this period: trade-adjustment assessments and nontariff barriers.

The effects of tariff barriers computed by this new generation of models were small, although they showed net benefits from trade liberalization in the majority of cases. Several papers examined the effects of the Tokyo Round and obtained very small estimates of gains in GDP. The largest gain, in Deardorff and Stern, was only 0.06 percent of GNP.¹²⁶ One paper actually predicted a small negative welfare effect, which means that the U.S. economy loses out by trading.¹²⁷ This is driven by a negative terms-of-trade effect in their model.¹²⁸ Whalley computed that a 33 percent cut in the tariff rate results in a less than 0.1 percent gain in GNP to the United States.¹²⁹ His estimates showed a decrease in GNP for the EEC and Japan.

Several papers that have estimated the effects on the U.S. economy of different types of trade barrier reductions are summarized in table 3.5. Although there are some differences in model specification among the papers, all use fundamentally the same modeling principle and show very small effects on GNP.

Trade adjustment is a critical and politically important issue for trade policy analysis. When trade barriers are lowered, industries that export or

¹²⁶Deardorff and Stern, *An Economic Analysis of the Effects of the Tokyo Round*, 1979.

¹²⁷Whalley and Wigle, "Price and Quantity Rigidities," 1982.

¹²⁸Terms of trade refers to the price of a country's exports relative to the price of its imports, the calculation of which is usually based on import and export price indexes.

¹²⁹Whalley, "An Evaluation of the Tokyo Round," 1982, 353.

BOX 3.4 Computable general equilibrium models

General equilibrium analysis has a long history in economics with the theoretical aspects largely worked out in the mid-20th century. Applied general equilibrium analysis seeks to explain consumer and producer behavior of an entire economy. In the 1970s and early 1980s, computable general equilibrium (CGE) models were first implemented.^a These models typically contain production or supply relations for a number of commodities, including producers' purchases of inputs from other producers. There are also equations that represent consumers' preferences for goods and their supply of labor. Typically a government sector is included that collects taxes and also purchases goods and services. Later models also incorporate savings and investment behavior. Every good and service has a market, and equilibrium occurs when supply equals demand in all markets. A typical modeling sequence is to calibrate a model with existing data so that it replicates current conditions; then a policy change is invoked, and the model is solved for a new equilibrium, which is compared to the initial equilibrium.

The strength of CGE models is in showing the interaction between different parts of the economy (i.e., producers, consumers, government, and foreign sectors) in a consistent manner. Budget and resource constraints in CGE models add a measure of realism. Large-scale CGE models require a large number of parameters, such as supply and demand elasticities. The demand for imported goods often assumes that similar domestic and imported goods are imperfect substitutes for each other, and this choice is represented by an elasticity of substitution between each imported and domestic good. Some newer models sidestep the difficulty of estimating these elasticities by using a monopolistic competition setup where industries produce similar but differentiated products; however, this approach leads to other data challenges.^b Progress has been made in constructing models with a greater number of sectors. Most of these models assume that firms are perfectly competitive, but there are CGE models with imperfectly competitive firms. Modeling investment behavior has improved with dynamic versions of CGE models, although this considerably increases computational intensity.

^aDixon et al., *ORANI*, 1997; Shoven and Whalley, *Applying General Equilibrium*, 1992.

^bPiermartini and Teh, "Demystifying Modelling Methods," 2005, 11.

that use imported inputs are likely to grow via increased export demand or reduced production costs. Industries that compete with imports will likely witness a decline as foreign goods become relatively more competitive. The transition to this new equilibrium where some industries are larger and others smaller is not instantaneous, but the adjustment costs of moving to the new equilibrium are predicted to be smaller than the positive benefits from freer trade to the country. There are effectively two types of negative effects. One is the immediate loss of jobs and wages; the second is the need to revamp factories, or make other changes to the capital structure, and to retrain workers. This is costly, as resources are required for retraining, and some existing capital goods may be useless in a new industry. Because adjustment costs tend to be small relative to the benefits, income transfers are possible, so that everyone can be made better off through liberalization.

Several papers have computed these adjustment costs for the Tokyo Round. Baldwin, Mutti, and Richardson calculated that 50 percent multilateral cuts in tariffs would lead to labor adjustment costs of \$3 million (1967 dollars) and capital adjustment costs of \$2.3 million versus an approximate consumer surplus gain of \$610 million.¹³⁰ Despite the overall benefit, difficulties occur because these costs tend to be concentrated either geographically or within an industry; five negatively affected industries were projected to lose more than 10 percent of their workforce.¹³¹ Baldwin reviewed several other contemporary studies of adjustment costs.¹³² He cited Mutti's 1977 estimate that there is roughly \$1.30 in benefits for every \$1 in adjustment costs. Other values are much higher: a 28-to-1 ratio from Baldwin and an 8-to-1 ratio from Cline.

Reforms of the Tokyo Round were also estimated to have a net positive effect on employment. Deardorff and Stern calculated that the United States would gain approximately 15,000 jobs, or a 0.02 percent net increase in the labor force as a result of Tokyo Round reforms.¹³³ This figure includes sectors with net job losses as well as sectors with net job gains.¹³⁴ Industrialized nations as a whole were projected to see a net gain of 134,000 jobs due to the Tokyo Round agreement. In making these estimates, Deardorff and Stern included liberalization of a few nontariff barriers, such as quotas and restrictions on government procurement.

¹³⁰Baldwin, Mutti, and Richardson, "Welfare Effects on the United States," 1980.

¹³¹*Ibid.*, 419.

¹³²Baldwin, "Trade Policies in Developed Countries," 1984b, 593.

¹³³Deardorff and Stern, *An Economic Analysis of the Effects of the Tokyo Round*, 1979.

¹³⁴*Ibid.*, V, table 1.

TABLE 3.6 Imports affected by NTMs, 1966 and 1986

Area	Share of total imports (%)		Import value (billions of \$)	
	1966	1986	1966	1986
United States	36.4	45.0	9.4	103.1
All countries ^a	25.3	48.0	29.5	355.5

Source: Laird and Yeats (1990), table 6.

^a“All Countries” refers to the European Community, Finland, Japan, Norway, Switzerland, and the United States.

As discussed in the history section, the Tokyo Round was the first to deal substantively with nontariff issues. This was reflected in the focus of some researchers in estimating nontariff barriers. The notable result was that the effects of lowering these barriers often dwarfed the effects from lowering tariff barriers.

Nontariff barriers, now increasingly called nontariff measures (NTMs), are much more difficult to quantify. As the first round to deal with NTMs, the Tokyo Round was uniquely difficult to assess. This difficulty was compounded by vague wording and relatively weak commitments. As an example of the difficulty, one NTM code of the Tokyo Round discussed the importance of maintaining international standards in health and safety “whenever possible,” (Technical Barriers to Trade, Article 2) and contained other similarly vague language. Laird and Yeats were among the first to construct quantitative measures of NTMs.¹³⁵ They constructed measures of such barriers by examining the number of products (at the SITC four-digit level¹³⁶) that have nontariff barriers attached to them. They found that the value of imports affected by NTMs (and their associated shares of total imports) increased between 1966 and 1986 both for the United States and all countries (table 3.6). Their estimates are somewhat exaggerated relative to the individual tariff lines (that is, at the SITC five-digit level); if any tariff line is restricted, then every line within that group is considered to be “affected.” Although their aggregation procedure overstates the effects of NTMs, it remains clear that NTMs affected an increasing share of imports between 1966 and 1986.

¹³⁵Laird and Yeats, “Trends in Nontariff Barriers of Developed Countries, 1966–1986,” 1990.

¹³⁶SITC refers to the Standard International Trade Classification, which is a commodity classification system of the United Nations. It is hierarchical. For example, suppose that 1111 is four-digit code; then any commodity defined by a five-digit code whose first four digits are 1111 is a subset of the aggregate commodity 1111.

To compute the changes in welfare when evaluating the effects of the Tokyo Round, Whalley incorporated NTMs into a CGE model and computed the effects of their removal.¹³⁷ He quantified a particular NTM by estimating a tariff equivalent of the distorting effect of the NTM, that is, the tariff rate that would have a similar effect on the economy. Whalley incorporated only those NTMs for which reasonably good estimates of the tariff equivalent could be made, although substantial subjectivity remained. For example, “buy domestic” restrictions on government procurement were incorporated into the model as a 50 percent tariff on imports for the EEC and Japan.¹³⁸ Moreover, government procurement does not behave strictly like a tariff; in certain circumstances—for example, if there is a sudden bout of inflation—the government may not be willing to pay as much for its supplies, which implies a smaller tariff equivalent.

Empirical studies of the Uruguay Round’s effects were largely focused on the more readily quantifiable trade policies of tariff and quota reduction. Table 3.7, reproduced from Piermartini and Teh, summarizes several key studies.

Recent Literature

There has been an explosion of research in recent years on the effects of trade liberalization. Three areas of research have received increasing interest. The first area is services, which are increasingly being traded. The second area is NTMs, which have been given more attention as they have grown in prominence during trade negotiations. In the current literature, the definition of NTMs is expanding, and more careful attention is paid to modeling the incidence and behavior of NTMs.¹³⁹ The third area is the channels of trade benefits, where a number of theoretical papers have proposed new approaches to quantifying the benefits from trade. These papers tended to project larger benefits from trade liberalization compared with previous literature. According to many papers, the effects of liberalizing NTMs eclipse those of liberalizing tariff measures. Similar large effects have been found from liberalization of the services industries, which were largely ignored in the foregoing literature. Empirical studies

¹³⁷Whalley, “An Evaluation of the Tokyo Round Trade Agreement,” 1982.

¹³⁸*Ibid.*, 350.

¹³⁹Nearly all services barriers fall into the category of nontariff barriers; however, as services are a critical component of modern economies, it is frequently worth defining and describing them separately.

TABLE 3.7 Uruguay Round studies

Author (date published)	Model assumptions	Liberalization assumptions	Increase in U.S. GDP (%)
Brown, Deardorff, Fox, and Stern (1996)	Static; perfect competition in agriculture; monopolistic competition and increasing returns to scale in manufacturing	Manufacturing, agriculture as scheduled; services barriers reduced by 25 percent	0.9
Francois, McDonald, and Nordstrom (1996)	Dynamic; increasing returns to scale and monopolistic competition	Manufacturing, agriculture as scheduled; MFA quotas lifted	0.6
Goldin and van der Mensbrugghe (1996)	Static; perfect competition; primary focus on agriculture	Manufacturing, agriculture as scheduled	0.1
Hertel, Martin, Yanagishima, and Dimaranan (1996)	Static; perfect competition, constant returns to scale	Manufacturing, agriculture as scheduled; MFA quotas lifted	0.4
Harrison, Rutherford, and Tarr ^a (1995)	Static; perfect competition, constant returns to scale	Manufacturing, agriculture as scheduled	0.4

Source: Piermartini and Teh, "Demystifying Modelling Methods," table 2, 2005, 23–24.

^aThis paper differs from that of Hertel et al. (1996) principally in that it assumes a greater number of sectors and regions.

tend to focus on two distinct aspects. The first is an assessment of the size of trade barriers, and the second is the effect of a partial or total removal of the barriers.

Nontariff measures are not always directly observable in the way that tariff barriers are. However, researchers have devoted considerable efforts to finding indirect ways of estimating these barriers. Ferrantino, in summarizing these methods, found that, broadly speaking, researchers look at anomalies in either prices or quantities to determine the extent to which trade is impeded.¹⁴⁰ Economic theory predicts that prices for a given good, adjusted for transportation costs, should be the same everywhere, provided there are no impediments to trade,¹⁴¹ and that any difference in price should imply the presence of such impediments. Determining the trade barrier,

¹⁴⁰Ferrantino, "Quantifying the Trade and Economic Effects," 2006.

¹⁴¹This is often referred to as the law of one price.

however, is not as simple as looking at price differences across countries because prices vary due to a number of nonpolicy reasons. Moreover, in the case of a good that is produced in only a few countries, determining the world price (i.e., what the price of the good would be in an unfettered market) is not a straightforward exercise.

More attention has been paid to modeling services since the Uruguay Round, when it emerged as a dominant agenda item. Generally, services require special treatment and cannot be modeled simply as a different type of good because of their complex interindustry linkages. Several papers attempt to quantify the effect of reducing barriers to trade in services. Robinson, Wang, and Martin attempted to quantify barriers in several services sectors while at the same time carefully laying out the difficulties of the exercise.¹⁴² These authors found a 50 percent cut in services barriers leads to a slightly less than 1 percent increase in welfare.¹⁴³ Brown, Deardorff, and Stern simulated a 33 percent reduction to barriers to trade in services and found a 1.45 percent positive effect on U.S. welfare.¹⁴⁴ Both studies were based on CGE models with service barriers constructed similarly to tariff barriers.

Services liberalization may provide greater gains from liberalization than those generated by goods liberalization, particularly where tariffs on goods have already reached low levels. Several papers suggest that lowering barriers to trade in services can produce a welfare effect 8 to 12 times greater than an equivalent decrease in goods barriers.¹⁴⁵ The result from Robinson, Wang, and Martin was something of an anomaly: they estimate up to 124 times greater benefits for services liberalization, primarily because they estimated an unusually small effect from goods liberalization.

To illustrate a potential best-case scenario, Bradford, Grieco, and Hufbauer used a number of elements from the right hand column of table 3.3 and arrived at several extremely large values for the benefits from trade liberalization.¹⁴⁶ For example, they calculated that trade policy liberalization after World War II had increased U.S. GDP by between 7

¹⁴²Robinson, Wang, and Martin, "Capturing the Implications of Services Trade Liberalization," 2002.

¹⁴³Ibid., 23.

¹⁴⁴Brown, Deardorff, and Stern, "Multilateral, Regional and Bilateral Trade Policy," 2003.

¹⁴⁵Hoekman, "Liberalizing Trade in Services," 2006, 24.

¹⁴⁶Bradford, Grieco, and Hufbauer, "The Payoff to America from Globalisation," July 2006.

and 13 percent. Also, they found that the removal of all remaining trade restrictions will raise U.S. GDP by an additional 4 to 12 percent annually. This calculation provides a useful illustration of potential gains, although caution is in order as economists have not yet completely delineated each individual channels' contribution to the domestic economy, and there are likely overlapping effects that must be dealt with carefully. It may, however, establish an upper bound on the economic effects of trade liberalization.

There is also a considerable body of econometric work that uses historical data to determine the effect of a past policy decision on an economy. Many of these studies focused on NAFTA, as well as the U.S.-Canada Free Trade Agreement. The consensus is that trade among partners increased after signing NAFTA, although this effect was generally more pronounced between the United States and Mexico. However, the research was divided between those that estimate a small level of trade diversion and those that estimate significant trade diversion. The potential for trade diversion is a major drawback of free trade agreements (FTAs). For example, suppose that the United States has historically imported a good from Malaysia when the tariffs imposed on Malaysian and Mexican goods were the same (presumably because Malaysia is the most efficient producer). NAFTA, by reducing Mexican tariffs, creates an incentive to purchase Mexican goods, even if they are produced in a less efficient manner. As a result, even if trade between two partners increases subsequent to a trade agreement, some of this increase could simply be replacing trade with countries outside of the free trade area. Romalis found evidence on the trade diversion side of the debate, arguing that despite significant increases in trade among NAFTA signatories, a large portion of this was made up of trade diversion, implying only small net gains from NAFTA.¹⁴⁷ On the other hand, Clausing estimated only a small trade diversion effect, with far more significant net welfare effects.¹⁴⁸ Aside from these agreements, a series of bilateral agreements have been struck since 2002. These agreements, while generally having economic significance for the partner country and political significance for both the United States and the partner country, have small effects on U.S. welfare.¹⁴⁹

¹⁴⁷Romalis, "NAFTA's and CUSFTA's Impact on International Trade," 2005.

¹⁴⁸Clausing, "Trade Creation and Trade Diversion," 2001. See USITC, *The Impact of Trade Agreements*, 2003, 93–100, for a detailed summary of the literature addressing this question.

¹⁴⁹See table F.1 for a summary of these agreements.

Negotiations for the Doha Round, assuming that they continue, have been estimated to provide little in the way of specific benefits to member countries. Two papers provided analysis of the economic effects of proposed tariff rate changes. Anderson and Martin examined the potential effects on agriculture,¹⁵⁰ while Gootiiz and Mattoo examined services, and both papers come to similar results.¹⁵¹ Currently, many countries have set many of their tariffs below the bound rates (rates that define the upper bound on tariffs that a country can levy) agreed upon in the Uruguay Round. The bound rates proposed in the DDA are substantially lower than those in the Uruguay Round, but are mostly still well above the current applied rates. As Gootiiz and Mattoo point out, the DDA therefore does not increase liberalization; rather it formalizes the current status, which at a minimum prevents future increases in tariffs.

Decreux and Fontagné used a CGE model to measure the potential effects of the DDA. Given that no agreements have been reached, the authors focused on a large number of potential scenarios, including tariff reductions on agriculture, nonagricultural market access, and services. Applied tariff rates were used, with assumptions made regarding the effect of lowering the bound rates. As with the literature for the Uruguay Round, these authors also found that cuts in services barriers have a much larger effect on welfare than do cuts in goods barriers; for example, services barriers may only need to be cut by a mere 25 percent to provide the same welfare gains as a 70 percent cut in goods barriers.¹⁵² The models (summarized in table 3.8) provide additional estimates of the potential effects of the DDA. Trade facilitation is modeled as a reduction in trade costs of between 1 to 3 percent of total world trade.¹⁵³ The main difference between the results obtained by Brown, Deardorff, and Stern and those found by Francois, Hoekman, and Woerz is in the effects of services barriers, where the former obtain far higher gains from liberalization with a more modest liberalization assumption (33 percent for Brown, Deardorff, and Stern, versus 50 percent for Francois, Hoekman, and Woerz).

¹⁵⁰Anderson and Martin, "Agricultural Trade Reform," 2005.

¹⁵¹Gootiiz and Mattoo, "Services in Doha," 2008.

¹⁵²Decreux and Fontagné, "A Quantitative Assessment of the Outcome of the Doha Development Agenda," 2006, 6.

¹⁵³Piermartini and Teh, "Demystifying Modelling Methods," 2005, 35.

TABLE 3.8 Doha Round studies

Study	Description	Increase in global GDP	
		%	Billions of 1997 \$
Anderson, Martin, and van der Mensbrugghe (2005)	Constant returns to scale and perfect competition; agriculture and manufacturing tariffs liberalized	0.9	263.5
Anderson, Dimaranan, Francois, Hertel, Hoekman, and Martin (2003)	Constant returns to scale and perfect competition; agriculture and manufacturing tariffs liberalized	0.9	264.8
Brown, Deardorff, and Stern (2003)	Increasing returns to scale and monopolistic competition; agriculture, manufacturing, and service barriers liberalized	7.2	2, 154.5
Cline (2004)	Constant returns to scale and perfect competition; agriculture tariffs and manufacturing tariffs and quotas	0.8	227.8
Francois, van Meijl, and van Tongeren (2003)	Increasing returns to scale and monopolistic competition (manufacturing only); agriculture, manufacturing, services barriers and trade facilitation	1.2	367.3
OECD (2003)	Constant returns to scale and perfect competition; agriculture, manufacturing tariffs and trade facilitation	0.6	173.6

Source: Piermartini and Teh, "Demystifying Modelling Methods," tables 3 and 4, 2005, 27–29, 31.

Conclusion and Timeline

An enormous amount of constructive work has been done to establish trade liberalization as a common international goal and to construct the necessary regulations and institutions to support that goal. Aside from the tangible and quantifiable reductions in barriers to trade and the establishment of the World Trade Organization, the liberalization process has resulted in a legacy of conventions and procedures intended to reduce the possibility of reversals of trade liberalization commitments. There have, of course, been obstacles along the way. These include domestic economic and political struggles within negotiating countries that spill over into international trade negotiations and conflicts between developed and developing nations regarding the role of international trade in development. The economic literature has extensively evaluated the progress of trade liberalization. The consensus of this literature is that the United States has benefited substantially from past tariff liberalization. Moreover, significant future gains are expected as liberalization of services and other nontariff measures are negotiated.

Currently trade liberalization faces three potential obstacles. The Doha Development Agenda faces an uncertain future. These talks have been ongoing since 2001 and may still be completed, but it is far from certain when, or if, this will occur. The President's authority to present agreement-implementing legislation to Congress for a simple up-or-down vote—trade promotion authority—has lapsed, and it is unclear when this will be reinstated by Congress. Finally, the global financial crisis has raised the possibility of an increase in protectionist sentiment. There are a large number of institutional mechanisms in place that will make a retreat to the levels of protection seen during the Great Depression unlikely; nevertheless, the current economic situation may have a substantial influence on the future direction of trade policy.

Important legislation, policy changes, and events of the past 75 years of U.S. trade policy are summarized in a timeline below.

Timeline of Important U.S. Legislation, Policy Changes and Related Events

- June 17, 1930 The U.S. Tariff Act of 1930 (Smoot-Hawley Tariff, Pub. L. No. 71-361) is enacted.
- June 12, 1934 The U.S. Act to Amend the Tariff Act of 1930 (Reciprocal Trade Agreements Act, Pub. L. No. 73-316) is enacted.
- Aug. 22, 1947 The United Nations Economic and Social Council approves the Draft Charter for the International Trade Organization (ITO) of the United Nations in Geneva, Switzerland.
- Oct. 30, 1947 Participating governments sign the General Agreement on Tariffs and Trade (GATT), which consists of broad trade provisions to govern particular concessions made during the Geneva Round of multilateral tariff negotiations.
- Jan. 1, 1948 The GATT enters into force.
- Mar. 24, 1948 Participants at the United Nations Conference on Trade and Employment in Havana, Cuba sign the draft charter to create the ITO.
- Dec. 8, 1950 After submitting the Draft Charter for the ITO to the U.S. Congress the previous year, President Truman withdraws it from congressional consideration and does not resubmit it.
- June 16, 1951 The Trade Agreements Extension Act of 1951 (Pub. L. No. 82-50) is enacted, establishing a statutory “escape clause” procedure.
- Sept. 10, 1955 Japan accedes to the GATT.
- Nov. 1, 1955 Japan begins to place voluntary export restraints on cotton textiles, plywood, and other goods to the United States to avoid possible restrictive import measures to protect U.S. domestic markets.
- Jan. 1, 1958 The Treaty Establishing the European Economic Community (“Treaty of Rome”) enters into force.
- Aug. 20, 1958 The U.S. Trade Agreements Extension Act of 1958 (Pub. L. No. 85-686) is enacted, establishing procedures that limit the president’s authority to reduce tariff rates when negotiating a foreign trade agreement.
- Sept. 1, 1960 The GATT Dillon Round of multilateral trade negotiations begins.

- May 2, 1961 President Kennedy announces a program to help the U.S. textile industry that was hurt by increased imports.
- July 21, 1961 The Short-Term Arrangement on Cotton Textiles is negotiated and established under the GATT.
- July 1, 1962 The European Economic Community's (EEC) Common Agricultural Policy enters into force.
- Oct. 1, 1962 The Long-Term Arrangement on Cotton Textiles is negotiated and established under the GATT.
- Oct. 11, 1962 The U.S. Trade Expansion Act of 1962 (Pub. L. No. 87-794) is enacted, establishing the Office of the Special Trade Representative and the Trade Adjustment Assistance Program.
- Jan. 7, 1964 The United States suspends concessions on goods imported from the EEC (e.g., light trucks) in response to the implementation of the EEC Common Agricultural Policy that sharply raises import duties on U.S. exports of poultry to the EEC (U.S.-EEC "chicken war").
- May 4, 1964 The GATT Kennedy Round of multilateral trade negotiations begins.
- Jan. 16, 1965 U.S.-Canada Agreement Concerning Automotive Products is signed.
- Jan. 1, 1969 Japan and the members of the European Coal and Steel Community agree to place voluntary export restraints on steel products destined for the United States.
- Aug. 16, 1971 The United States suspends the convertibility of the U.S. dollar into gold; imposes temporary U.S. wage and price controls, as well as import surcharges.
- Oct. 1, 1971 The United States reaches voluntary export restraint agreements with Hong Kong, Japan, South Korea, and Taiwan for textiles made with wool and man-made fibers.
- Dec. 18, 1971 The "Smithsonian Agreement" enters into force in Dec. 1971 and provides a temporary realignment of currency exchange rates; the Aug. 1971 U.S. import surcharges are subsequently terminated.
- Dec. 31, 1971 The United States records its first merchandise trade deficit in the 20th century—a deficit of approximately \$2.5 billion in 1971.
- Sept. 14, 1973 The GATT Tokyo Round of multilateral trade negotiations begins.

- Oct. 16, 1973 The first OPEC oil price shock takes place from Oct. 1973 to Mar. 1974.
- Jan. 1, 1974 The GATT Multifiber Arrangement governing trade in textiles and apparel enters into force, succeeding the 1962 GATT Long-Term Arrangement on Cotton Textiles.
- Jan. 3, 1975 The U.S. Trade Act of 1974 (Pub. L. No. 93-618) is enacted. The act introduces “fast track” congressional approval provisions for U.S. trade agreements, creates section 301 provisions to counter “unfair trade practices,” and authorizes a U.S. Generalized System of Preferences for developing countries. Title IV (Jackson-Vanik Amendment) includes provisions to extend nondiscriminatory tariff treatment (“most favored nation” status) to nonmarket economies (such as in Communist East Europe) that permit their citizens to emigrate freely, but effectively denies such treatment to countries (notably, the Soviet Union) that do not.
- Jan. 1, 1976 The U.S. Generalized System of Preferences enters into force.
- Feb. 15, 1978 The U.S. Treasury Department introduces a trigger-price mechanism to monitor dumping of steel imports in the United States.
- July 26, 1979 Trade Agreements Act of 1979 (Pub. L. No. 96-39) is enacted. The act provided implementing legislation for the Tokyo Round and eased the requirements for obtaining relief under domestic trade remedies.
- May 2, 1981 Japan announces voluntary export restraint measures on its automobile exports to the United States.
- Aug. 5, 1983 The U.S. Caribbean Basin Economic Recovery Act (CBERA, Pub. L. No. 98-67) is enacted, providing preferential duty treatment for eligible products from the region.
- Nov. 9, 1983 The first U.S.-Japan semiconductor agreement is reached.
- Jan. 28, 1985 The U.S.-Japan Market-Oriented Sector-Specific talks open, concerning electronics, forest products, medical equipment, pharmaceuticals, and telecommunication products.
- Sept. 1, 1985 The U.S.-Israel Free Trade Agreement enters into force.
- Sept. 22, 1985 The United States, Japan, West Germany, France, and the United Kingdom sign the Plaza Accord to reduce the value of the U.S. dollar on foreign-exchange markets in response to the large U.S. current account deficit.

- Sept. 2, 1986 The second U.S.-Japan semiconductor agreement is reached.
- Sept. 20, 1986 The GATT Uruguay Round of multilateral trade negotiations begins.
- Feb. 22, 1987 The United States, Japan, West Germany, France, the United Kingdom, and Canada sign the Louvre Accord to stabilize the value of the U.S. dollar on foreign-exchange markets, whose decline began after the Plaza Accord 18 months earlier.
- Aug. 23, 1988 The U.S. Omnibus Trade and Competitiveness Act of 1988 (Pub. L. No. 100-418) is enacted, establishing the negotiating principles for the next multilateral round of trade talks, including a focus on services, intellectual property rights, and investments as well as the establishment of an improved dispute settlement mechanism. The act also introduced “super” and “special” section 301 trade provisions and requires annual reports on foreign trade barriers. The act also included provisions to promote domestic competitiveness and to enact the HTS.
- Dec. 31, 1988 The U.S. trade deficit declines for the first time in seven years, from \$170.3 billion in 1987 to \$119.1 billion in 1988.
- Jan. 1, 1989 The U.S.-Canada Free Trade Agreement enters into force.
- Dec. 4, 1991 The U.S. Andean Trade Preference Act (ATPA, Pub. L. No. 102-182) is enacted, providing preferential duty treatment for eligible products from Bolivia, Colombia, Ecuador, and Peru.
- Jan. 9, 1992 A U.S.-Japan agreement on auto and auto parts is reached to voluntarily increase Japanese imports of U.S.-made automobile parts.
- Oct. 21, 1992 The U.S. Export Enhancement Act of 1992 (Pub. L. No. 102-429) is enacted, calling for a government-wide strategy for U.S. export promotion that is announced in Sept. 1993 as the National Export Strategy.
- Dec. 15, 1993 The GATT Uruguay Round of multilateral trade negotiations concludes, with 125 countries signing the Uruguay Round Agreements.
- Jan. 1, 1994 The North American Free Trade Agreement (NAFTA) enters into force.
- Dec. 11, 1994 The Summit of the Americas is held, in which participants pledge to complete negotiations for a free trade agreement of the Americas by 2005.

- Jan. 1, 1995 The World Trade Organization (WTO) is established as a successor to the General Agreement on Tariffs and Trade.
- July 1, 1997 The WTO Information Technology Agreement enters into force.
- Feb. 6, 1998 The WTO Basic Telecommunications Agreement enters into force.
- Jan. 29, 1999 The WTO Financial Services Agreement enters into force.
- Dec. 3, 1999 The WTO Ministerial Conference at Seattle, Washington, fails to launch a new Millennium Round of multilateral trade negotiations.
- May 18, 2000 The U.S. Trade and Development Act of 2000 (Pub. L. No. 106-200) is enacted, providing duty-free treatment for eligible products from designated developing countries and territories. Title I of the act is the African Growth and Opportunity Act (AGOA) which amends the U.S. GSP program to provide duty- and quota-free treatment for certain products from eligible sub-Saharan African beneficiary countries.
- Oct. 1, 2000 The U.S. Caribbean Basin Trade Partnership Act amends the 1984 CBERA to authorize duty- and quota-free treatment for apparel from qualifying CBERA countries.
- Nov. 14, 2001 The WTO Ministerial Conference at Doha, Qatar, launches the Doha Development Agenda (DDA or Doha Round) of multilateral trade negotiations.
- Dec. 17, 2001 The U.S.-Jordan Free Trade Agreement enters into force.
- Mar. 20, 2002 The United States imposes increased tariffs and tariff-rate quotas on 14 steel products under Section 201 (“safeguard” or “escape clause”) provisions of the U.S. Trade Act of 1974.
- May 13, 2002 The U.S. Farm Security and Rural Investment Act of 2002 (Pub. L. No. 107-17) is enacted and increases domestic support for U.S. farmers.
- Aug. 6, 2002 The Trade Act of 2002 is enacted (Pub. L. No. 107-210), including the authorization of trade promotion (formerly fast track) authority and the reauthorization of trade adjustment assistance.
- Sept. 14, 2003 The WTO Ministerial Conference at Cancun, Mexico, closes without consensus, largely because of disputes about reductions in agricultural support payments and a tariff-cutting formula to liberalize market access for nonagricultural products.

- Jan. 1, 2004 The U.S.-Singapore Free Trade Agreement enters into force.
- Jan. 1, 2004 The U.S.-Chile Free Trade Agreement enters into force.
- Jan. 1, 2005 The U.S.-Australia Free Trade Agreement enters into force.
- Nov. 8, 2005 The U.S.-China Memorandum of Understanding is signed, limiting exports of Chinese textiles and clothing to the United States during 2006-08.
- Jan. 1, 2006 The U.S.-Central America-Dominican Republic Free Trade Agreement enters into force.
- Jan. 1, 2006 The U.S.-Morocco Free Trade Agreement enters into force.
- July 24, 2006 The WTO Doha Round of multilateral trade negotiations is suspended over the inability to agree on market-access liberalization for agricultural and nonagricultural products and reductions in agricultural support.
- Aug. 1, 2006 The U.S.-Bahrain Free Trade Agreement enters into force.
- Nov. 22, 2006 The United States signs the U.S.-Colombia Free Trade Agreement, which is pending congressional approval in 2009.
- June 22, 2007 The WTO Doha Round resumes in Feb. 2007 but is suspended again in June 2007 after failing to agree on issues of market-access liberalization for agricultural and nonagricultural products.
- June 28, 2007 The United States signs the U.S.-Panama Trade Promotion Agreement, which is pending congressional approval in 2009.
- June 30, 2007 The United States signs the U.S.-Korea Free Trade Agreement, which is pending congressional approval in 2009.
- July 30, 2008 The WTO Doha Round resumes in Feb. 2008 but is suspended again in July 2008 after failing to agree on issues of market-access liberalization for agricultural and nonagricultural products and, in particular, a special safeguard mechanism for developing country agricultural imports.
- Jan. 1, 2009 The U.S.-Oman Free Trade Agreement enters into force.
- Feb. 1, 2009 The U.S.-Peru Trade Promotion Agreement enters into force.

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