The Impact on the U.S. Economy of Including the United Kingdom in a Free Trade Arrangement With the United States, Canada, and Mexico

Investigation No. 332-409

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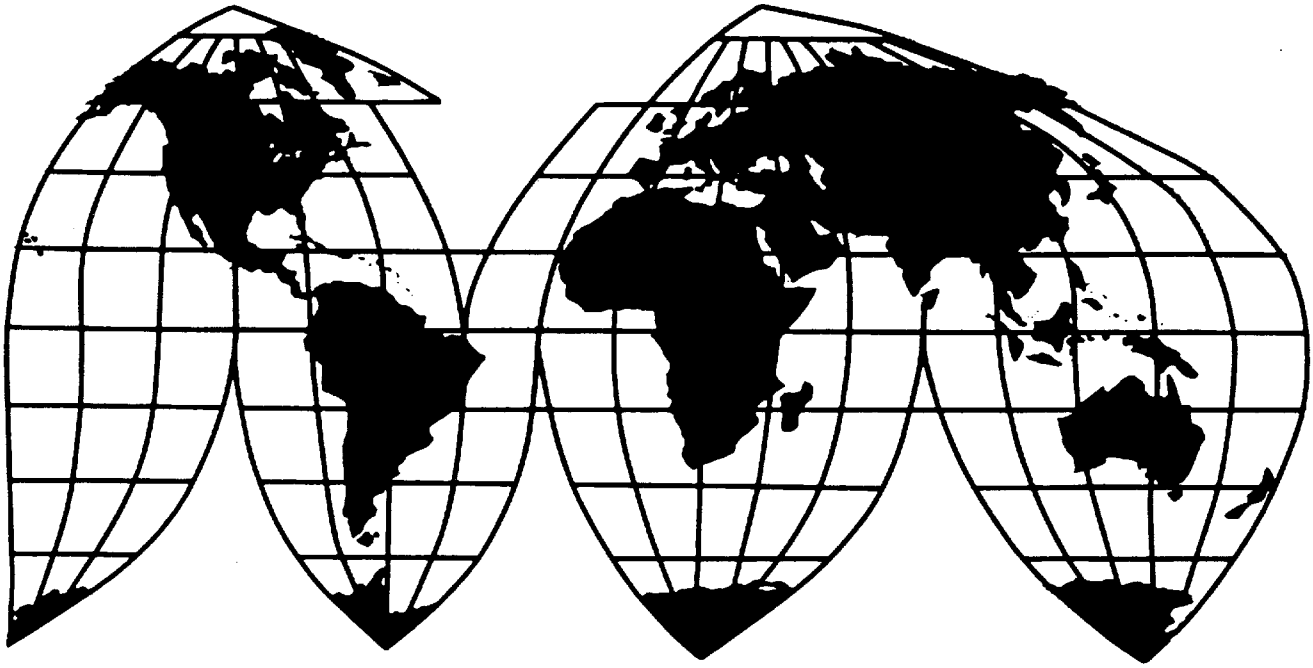
U.S. International Trade Commission



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Project Team
Kyle Johnson, *Project Leader*
Soamiely Andriamananjara, *Deputy Project Leader*

Office of Economics
Victoria Chomo, Michael Ferrantino, Joanne Guth, and H. Keith Hall

Office of Industries
Sylvia McDonough, *Industries Coordinator*
Yvette Alt and John Davitt

Under the direction of
Hugh Arce, Chief
Research Division

Support Staff
Cecelia Allen, Monica Reed, Patricia M. Thomas, and Wanda Tolson

Address all communications to
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PREFACE

On November 18, 1999, the Senate Finance Committee requested the U.S. International Trade Commission (ITC) to "investigate the impact of including the United Kingdom in a free trade arrangement with the United States, Canada, and Mexico." The request was made under the provisions of section 332(g) of the Tariff Act of 1930. The Committee requested that the Commission's report include (i) an overview of the current economic relationship among the United States, Canada, Mexico, and the United Kingdom (UK); (ii) the identification of all existing barriers to trade and investment among the United States, Canada, Mexico, and the United Kingdom; (iii) for the United States and the United Kingdom, the estimated effect of eliminating these barriers on a number of economic aggregates; and (iv) a discussion of any increase in quality or selection of goods, or other consumer benefits.

The ITC solicited public comment for this investigation by publishing a notice in the *Federal Register* on December 30, 1999 (64 F.R. 250). A public hearing was held on April 11, 2000, and a telephone survey of industry sources was conducted in April and May of 2000. Members of the ITC research staff conducted interviews with interested parties during a trip to London, UK, from March 14 to March 22, 2000. Appendix A contains a copy of the request letter from the Senate Finance Committee, Appendix B contains a copy of the *Federal Register* notice, and Appendix H contains a list of participants in the public hearing.

ABSTRACT

On November 18, 1999, the Senate Finance Committee requested the U.S. International Trade Commission to "investigate the impact of including the United Kingdom in a free trade arrangement with the United States, Canada, and Mexico." The request was made under the provisions of section 332(g) of the Tariff Act of 1930.

This report begins with an overview of the current economic relationship among the United States, Canada, Mexico, and the United Kingdom (UK), including an enumeration of the existing barriers to trade and investment among those four countries. In 1998, UK imports of goods and services from the North American countries totaled more than $100 billion, and the North American countries' imports from the UK were about $65 billion. Services and machinery and equipment accounted for more than half of this total. The United States is the UK's largest single trading partner, accounting for about 12 percent of the UK's total trade and for 90 percent of its trade with North America. Trade between the UK and the North American countries is subject to relatively few trade barriers. The United States and the UK are the two largest global investors and largest recipients of foreign direct investment, and are also each other's largest foreign investor.

Because it is unclear under what form the UK would enter a trade agreement with the countries of North America, all of the quantitative analyses are conducted under two scenarios. In one the UK remains within the European Union (EU) trade environment, and in the other the UK essentially withdraws from this trade environment. The Global Trade Analysis Project (GTAP) general equilibrium trade model was used to obtain quantitative estimates of the effects of a free trade arrangement between the UK and the members of NAFTA. Data in this model date from 1995, modified to incorporate effects of subsequent trade agreements, so results of the model should be interpreted as if the contemplated trade agreement were taking place in 1995, and NAFTA and other trade agreements had already been implemented. Because trade between the UK and the North American countries is subject to relatively low tariffs, it was found that elimination of these tariffs would have minimal effects on the economies of the countries in question. Depending on the modeling scenario, a complete elimination of tariffs on products traded between the UK and the United States would increase U.S. imports from the UK by 7 to 12 percent, and UK imports from the United States by 11 to 16 percent. Effects on aggregate output, as measured by GDP, are insubstantial. U.S. GDP would increase by less than $90 million. Effects on the UK and the EU are also small. Price levels in the United States would increase slightly, in no case by more than 0.31 percent. Separate partial equilibrium modeling suggests the contemplated free trade arrangement would have very small effects on the manufacturing output associated with bilateral FDI between the UK and the United States. There is no precedent for a member withdrawing from the EU, so the impact on the UK's trade relationships with non-EU and non-NAFTA countries is unclear. This report does not attempt to estimate the potential impact.

CONTENTS

CONTENTS-*Continued*

CONTENTS-*Continued*

CONTENTS-*Continued*

Page

Tables—*Continued*

EXECUTIVE SUMMARY

Background and Scope of the Study

On November 18, 1999, the Senate Finance Committee requested the U.S. International Trade Commission (Commission or ITC) to "investigate the impact of including the United Kingdom in a free trade arrangement with the United States, Canada, and Mexico." The request was made under the provisions of section 332(g) of the Tariff Act of 1930. The Committee requested that the Commission's report include (i) an overview of the current economic relationship among the United States, Canada, Mexico, and the United Kingdom (UK); (ii) the identification of all existing barriers to trade and investment among the United States, Canada, Mexico (the North American countries), and the UK; (iii) for the United States and the UK, the estimated effect of eliminating these barriers on a number of economic aggregates; and (iv) a discussion of any increase in quality or selection of goods, or other consumer benefits.

Principal Findings

The United States is the UK's largest single trading partner, accounting for about 13 percent of the UK's total trade and for 90 percent of its trade with North America in 1998. Collectively, however, the other countries of the EU carry on about four times as much trade with the UK as does the United States. Because trade between the UK and the North American countries is subject to relatively low tariffs, it was found that elimination of these tariffs would have small effects on the economies of the countries in question. Model results are based on 1995 data, modified to incorporate subsquent trade agreements. Results do not simulate the removal of nontariff barriers or the imposition of retaliatory barriers. Depending on the modeling scenario, a complete elimination of tariffs on products traded between the UK and the United States would increase U.S. imports from the UK by 7 to 12 percent, and UK imports from the United States by 11 to 16 percent. Effects on aggregate output, as measured by GDP, are insubstantial. Because of increased demand for U.S. goods for export to the UK, price levels in the United States would increase slightly, in no case by more than 0.31 percent. Because present tariffs in the United States on imports from the UK in many cases consist of high duties against narrowly defined products, overall tariff reductions are expected to have small aggregate effects, but may increase the availability of such products at lower prices and thus increase the range or variety of products available to consumers.

Analytical Approach

Trade and investment between the UK (as a member of the EU) and the North American countries is subject to relatively few barriers. All countries concerned are members of the World Trade Organization (WTO), and have reduced their trade barriers in accord with their obligations. However, some key barriers remain. For much of the discussion in this report, a "key tariff barrier" is a Uruguay Round bound rate of 15 percent or higher that has not been reduced by subsequent agreements. Such tariffs are considered "peak tariffs" in the WTO. Key nontariff barriers are those identified by the European Commission's *Market Access Database* (for North American barriers) and by the United States Trade Representative's *National Trade Estimates on Foreign Trade Barriers* (2000 edition). Additional information on trade and trade barriers, and on the trade relationships connecting the UK with the North American countries and with the EU, was obtained

from fieldwork undertaken by ITC staff members in March, from a public hearing held on April 11, 2000, and from a telephone survey conducted during May and June 2000.

The analysis of the effects of removing trade and investment barriers proceeds from the enumeration of the key barriers. A general equilibrium analysis, using the data and modeling structure of the Global Trade Analysis Project (GTAP)[1] was performed, in which the effects of removing all tariff barriers (not just those in excess of 15 percent) were simulated. A quantitative assessment of the effects of removing most nontariff barriers was not feasible, due to their generally small areas of applicability and the lack of quantitative measurements of their scale: thus, results are likely to understate the effects of eliminating all barriers. Because bilateral investment effects are not explicitly treated in the GTAP model, an analysis of the effects of the removal of tariff barriers on direct investment was performed separately, using partial equilibrium tools. Because it is unclear under what form the UK would enter a trade agreement with the countries of North America, all of the quantitative analyses are conducted under two scenarios. In one the UK remains within the EU trade environment, and in the other the UK essentially withdraws from this environment.

The North Atlantic Trade Relationship

United Kingdom Trade and Investment with North America

The United States is the UK's largest single trading partner, accounting for about 13 percent of the UK's total trade and for 90 percent of the UK's trade with North America. The United States and the UK are the two largest global investors and largest recipients of foreign direct investment, and are also each other's largest foreign investor. In 1996, the United States accounted for almost 39 percent of the stock of foreign direct investment in the UK. The share of UK direct investment in Canada has declined from 5 percent to 2 percent between 1990 and 1996. Canada's share of UK inward investment also declined from 4 percent to less than 3 percent between 1990 and 1996.

In 1998, UK imports of goods and services from the North American countries totaled more than $100 billion, and their imports from the UK were about $65 billion. Services and machinery and transportation equipment accounted for more than half of this total. The trade relationship is strongest between the United States and the UK. From 1991 through 1997, the value of UK exports to the United States increased by about 50 percent in nominal terms and UK imports of U.S. products rose at a similar pace.

Despite the healthy trade relationship between North American countries and the UK, however, some trade barriers exist. These are evident for trade in agricultural products; pharmaceuticals; textiles, apparel and footwear; machinery and equipment; services; and miscellaneous products.

The following table provides selected highlights of the major sectoral trade flows among the North American countries and the UK. In addition, selected trade barriers are described. All trade barriers described here and in other sections of this report are derived from documents provided by other organizations, notably including the World Trade Organization, the European Commission, and the Office of the United States Trade Representative (a complete list of sources is provided on page D-2). The discussion of a "trade barrier" here is not a determination by the ITC of the existence of a trade barrier.

[1] See Thomas W. Hertel (ed.), *Global Trade Analysis: Modeling and Applications* (New York: Cambridge University Press, 1997).

Table ES-1
Overview of Trade and Trade Barriers Between the UK and the North American Countries

Sector	Overview of Trade	Selected Trade Barriers
Agriculture	North America imports only small amounts of agricultural sector products from the UK, and all three countries have trade barriers in this sector. Although the United States imported a total of $50 billion in agricultural products in 1998, about one-third of these were from within NAFTA, and less than 3 percent were from the UK. For the same year, UK imports of agricultural products were $31 billion, with just 7 percent coming from NAFTA countries.	Mexican import tariffs are the most significant barriers for the UK and range as high as 260 percent. Canadian nontariff import barriers affect the tobacco, alcoholic beverage, fishing, meat, poultry, and dairy industries. The UK has high tariffs on meat, fish tobacco, sugar, and dairy products. UK nontariff barriers in this sector are sanitary and phytosanitary and labeling regulations, delays in approval processes, and price supports. U.S. impediments to agricultural product trade include sanitary and phytosanitary regulations, environmental standards, and the administration of tariff quotas. A number of U.S. tariffs on fish, tobacco, citrus, soybean oil, and vegetable products exceed 15 percent.
Pharmaceutical Products	The UK accounted for just over 15 percent of the $9 billion in U.S. pharmaceutical imports in 1998, while Canada and Mexico together provided less than 10 percent of U.S. imports. However, the United States supplied nearly 60 percent of Canada's $2 billion in pharmaceutical imports, and about one-third of Mexico's $679 million imports. For the UK, 85 percent of its $5 billion in pharmaceutical imports for 1998 were supplied by non-NAFTA countries.	Trade in this sector faces regulatory approval difficulties in the UK, Mexico, and the United States and restrictive pricing policies in the UK and Mexico. Intellectual property protection is a trade issue in all four countries.
Textiles, Apparel, and Footwear	In the textiles, apparel, and footwear sector, each of the four countries of this study has high tariffs, which create significant barriers to trade. For the UK, more than 95 percent of its $23 billion in textile, apparel, and footwear imports came from non-NAFTA countries in 1998, and 85 percent of the $82 billion in U.S. imports that year were from sources outside North America or the UK.	NAFTA provisions giving duty preferences to imports of North American origin spurred trade in both directions between the United States and Mexico. The EU has cited a number of regulations, including some NAFTA rules, that impede trade in this sector.
Machinery and Transportation Equipment	The United States supplied more than 70 percent of its NAFTA partners' machinery and transportation equipment products in 1998, representing $81 billion in imports to Canada and $48 billion in Mexican imports. But the United States imported less from its NAFTA partners and from the UK. About 30 percent ($138 billion) of U.S. machinery transportation and equipment imports came from Mexico and Canada in 1998, and about 20 percent ($30 billion) of UK imports came from NAFTA countries.	Nontariff barriers in each of the four countries are the most significant impediments in this sector, and these barriers pertain primarily to motor vehicle, aircraft, and shipbuilding products.

Table ES-1—*Continued*
Overview of Trade and Trade Barriers Between the UK and the North American Countries

Sector	Overview of Trade	Selected Trade Barriers
Services	In 1998, the United States supplied 62 percent of Canada's service sector imports and 22 percent of the UK service imports. The United States itself imported $165 billion in services.	A large number of barriers have been reported to affect a variety of service industries in each of the four countries. The most significant of these affecting trade volumes are in the banking and securities, insurance, and telecommunication service industries.
Miscellaneous Products	Miscellaneous products consist of a diverse mixture of goods from a number of industries not readily identifiable within other economic sectors. They include products such as musical instruments, firearms, furniture, brooms, artwork, and leather goods. Total imports of these products for the three NAFTA countries were $62 billion in 1998, and UK imports of miscellaneous products were $12 billion.	U.S. and Canadian tariffs for certain products in this category, reference prices in Mexico, and EU regulation presented the most significant barriers to trade among the four countries.
Energy and Fuels	Trade volumes between NAFTA countries and the UK are at relatively low levels in some of these sectors. For example, UK imports of energy and fuels from NAFTA countries were less than 10 percent of total sector imports of $8 billion in 1998, and 3 percent of NAFTA-country imports of $72 billion in energy and fuels came from the UK that same year. In contrast, more than one-third of sector imports for the United States, Canada, and Mexico came from NAFTA partners.	Few trade barriers exist for energy and fuels.
Chemicals, Plastics, and Rubber	The United States is the source of more than 10 percent of UK imports of chemicals, plastics, and rubber, but supplied more than half of Mexican and Canadian imports of these products in 1998, for a total of $29 billion. Canada and Mexico provided more than one-fifth, or $16 billion, of U.S. imports in this sector in 1998.	For the most part, impediments to trade in this sector are few. The Uruguay Round harmonization of chemical tariffs and the elimination of tariffs on pharmaceutical intermediates has lowered tariff barriers for the sector. The EU feels that Canadian tariffs on rubber and plastics, which will average 6.9 percent at the end of Uruguay Round reductions, are a barrier to trade. Mexico prohibits the import of certain chemicals for health and safety reasons, requires import authorization and licenses for most chemicals and plastics, and has implemented reference prices for chemicals. U.S. suppliers consider EU standards on certain chemicals to be unnecessarily restrictive

Table ES-1—*Continued*
Overview of Trade and Trade Barriers Between the UK and the North American Countries

Sector	Overview of Trade	Selected Trade Barriers
Forest Products	The United States supplies more than 85 percent of Canada and Mexico's forest product imports, and total sector imports were valued at $8 billion for Canada and $4 billion for Mexico in 1998. That same year, two-thirds of U.S. imports, or $22 billion, came from Canada. In 1998, the UK imported most of its $14 billion in forestry products from the European Union, which has a large and competitive wood and paper industry, especially in the Scandinavian countries.	Research has identified few impediments to trade in this sector. The most significant barriers are the U.S. tariff of 18 percent ad valorem on rattan and bamboo handbags, and luggage, Mexico's system of reference prices, and Canadian and Mexican prohibitions on the importation of printed material.
Minerals and Metal Products	Because import patterns for minerals and metal products are affected by transportation costs, the machinery and equipment assembly industries, and the availability of natural resources, NAFTA partners have tended to integrate their operations in this sector. The UK relies primarily on non-NAFTA countries for trade in this sector. The United States supplies a large share of sector imports to manufacturing and mining companies in Canada and Mexico, and more than 85 percent of the $32 billion in UK imports for 1998 in this sector came from non-NAFTA countries.	Research has identified few impediments to trade in this sector. Canadian tariffs on certain products of asbestos or glass fibers reach 15.7 percent and the EU claims that tariffs on pottery and china are barriers. U.S. duties on certain low-value flatware range from 16 percent to 24 percent, on certain other tableware and glassware from 15 percent to 28.5 percent, and are 15 percent on certain titanium products. Nontariff barriers in this sector concern burdensome Mexican testing procedures for ceramic tile imports, Mexican reference prices for steel, "Buy American" restrictions, U.S. aircraft fastener regulations, and U.S. subfederal content requirements.

Source: USITC staff compilation.

Analysis Results: The Elimination of Existing Tariff Barriers

General Equilibrium Results

The Global Trade Analysis Project (GTAP) general equilibrium trade model was used to obtain quantitative estimates of the effects of a free trade arrangement between the UK and the members of NAFTA. The standard data set (based in 1995) was modified to reflect an environment in which all policy measures ratified under NAFTA, the Uruguay Round, the Information Technology Agreement (ITA) and the recent EU-Mexico Free Trade Arrangement are completely implemented. Thus, all results should be interpreted as if the contemplated trade agreement were taking place in 1995, all its effects were felt immediately, and the Uruguay Round, NAFTA, and the EU-Mexico FTA had already been fully implemented. The analysis is conducted under two hypothetical scenarios. The first scenario (experiment 1) assumes that the UK is able to form a free trade arrangement with North America while keeping intact all essential features of its membership in the EU. The second scenario (experiment 2) is based on the assumption that the UK would sever its relationship with the EU. The results reported below reflect tariff eliminations and do not, in general, account for the liberalization of nontariff barriers, nor do they take into account any retaliatory trade measures that the UK may face.

While modeling the information of the FTA itself is a relatively straightforward task, a challenge in this analysis is to determine the trading relationship that may prevail between the UK and the EU following implementation of the agreement. This is particularly relevant because, as a member of the EU, the UK does not have a well-defined competence to deviate unilaterally from the EU's common external trade policies. Although the two modeling scenarios may seem extreme, they are intended to approximate upper- and lower-bound cases for the range of possible relationships that might prevail between the UK and the EU after the establishment of an FTA between the UK and the North American countries.

Experiment 1. UK-North American Free Trade Arrangement

The estimated results for experiment 1 indicate that total U.S. exports increase by $1.9 billion (0.24 percent), while imports increase by $2.9 billion (0.32 percent). There is a substantial redirection of U.S. exports towards the UK and away from other countries, primarily the rest of the EU. Agricultural exports to the UK increase by more than 100 percent, while processed food exports increase by 54 percent. Total UK exports to the United States increase by $2.8 billion while those to the EU decrease by $1 billion. UK exports of textile products to Canada and the United States increase by 116 percent and 63 percent, respectively. Total UK imports from Canada and the United States expand (by $ 638 million and $5.1 billion, respectively) while imports from the EU drop (by $1.7 billion). UK imports of processed food products from Canada increase by 224 percent and imports of agricultural products from the United States increase by 103 percent. Overall trade balances in the United States and the UK decrease respectively by $396.6 million (0.23 percent) and $974.3 million (3.3 percent).

The effects of the contemplated FTA in terms of changes in each country's Gross Domestic Product (GDP) are very small. The UK's GDP increases by less than one tenth of one percent or $100 million. U.S. GDP increases by $55 million while the EU (less the UK) and Canada's GDP decline by $51 million and $42 million, respectively. Changes in domestic production as well as the shifts in sectoral employment are in general small in percentage terms. For the United States, the preferential trading arrangement expands production in the agriculture, processed foods, and machinery sectors and shrinks the remaining sectors. The transportation industry declines by $503 million or 0.02 percent. In the UK, the free trade arrangement expands production in the textiles, iron and steel, machinery, transportation, and chemical sectors, and shrinks the remaining sectors. The transportation sector in particular expands by $582 million while agriculture shrinks by $340 million. The price changes triggered by the FTA in both the United States and the UK are positive

but small. The only exception is the small decline in the price of agricultural commodities in the UK.

Experiment 2. UK-North American Free Trade Arrangement with EU Withdrawal

The estimated results for experiment 2 show that U.S. exports to the UK increase by $7 billion while exports to the other regions decline. This export expansion is larger than that in the first experiment because in this scenario trade barriers are imposed on UK imports from the EU, which improves the competitiveness of U.S. goods in the UK market. U.S. imports from the UK and the EU increase by $4.8 and $1.4 billion, respectively. U.S. agricultural and processed food exports to the UK increase respectively, by 125 percent and by 85 percent.

UK exports to the NAFTA members increase by $5.8 billion (11.4 percent), while exports to the EU decrease by $18.8 billion (13.0 percent). UK exports of textile and transportation products to the United States respectively increase by 68.8 percent and 32.8 percent. Total UK imports decrease by $13.8 billion (4.6 percent), with those from the EU declining by as much as $25 billion (16.5 percent). Imports of machinery and transportation goods from the United States increase by $3 billion (21.9 percent) and $1.8 billion (71.6 percent) respectively. The overall trade balance of the United States decreases by $2 billion while that of the UK increases by $2.9 billion.

As in scenario 1, the changes in GDP for all countries are very small. For Canada, the UK, and the EU GDP decreased by 0.01 percent ($49 million), 0.02 percent ($173 million) and 0.01 percent ($708 million). U.S. GDP increased by $86 million (0.0 percent). The changes in output and in sectoral labor demand are also generally low. In the United States, the FTA expands production in agriculture, processed foods, textiles, machinery and transportation sectors with the machinery sector expanding by more than $1 billion. For the UK, the agreement expands output in mining, iron and steel, other manufacturing, and services sectors with the services sector expanding by more that $2 billion. Similarly, the FTA in general leads to small price increases in the United States but small price declines in the UK.

Effects on FDI: Partial Equilibrium Results

A UK-NAFTA FTA, under the experiment 1 scenario, would cause only a modest expansion of the manufacturing output associated with bilateral FDI between the UK and the United States. Partial equilibrium modeling suggests that the expansion would be about 0.41 percent for UK FDI in the United States and about 0.27 percent for U.S. FDI in the UK. A UK-NAFTA FTA combined with imposition of the EU's common external tariff between the UK and other EU countries would induce modest contraction of the output associated with U.S. manufacturing FDI in the UK, by about 0.56 percent. Staff analysis of the results suggests that the primary channel through which tariff decreases or increases affect FDI is by lowering and raising the cost of imported intermediate inputs.

CHAPTER 1
Introduction

Background

This study was undertaken in response to a request from the Senate Finance Committee, made in a letter[1] received by the U.S. International Trade Commission (ITC or Commission) on November 18, 1999. In that letter the Commission was asked to "investigate the impact of including the United Kingdom in a free trade arrangement with the United States, Canada, and Mexico." The request was made under the provisions of section 332(g) of the Tariff Act of 1930. The Finance Committee requested that the Commission's report include (i) an overview of the current economic relationship among the United States, Canada, Mexico, and the United Kingdom (UK); (ii) the identification of all existing barriers to trade and investment among the United States, Canada, Mexico, and the UK; (iii) for the United States and the UK, the estimated effect of eliminating these barriers on a number of economic aggregates; and (iv) a discussion on any increase in the quality or selection of goods, or other consumer benefits.

The UK is a member of the European Union (EU).[2] Because the EU requires its members to maintain common external tariffs, it is not clear how the UK could entere into an FTA and provide zero tariffs to imports from North American countries, while maintaining its obligations to the EU. However, many commentators believe that a variety of arrangements could be worked out, should the UK enter into a North American FTA. Outcomes range from a complete retention of free trade, labor, and capital mobility among the EU states (including the UK) to severing the UK's ties to the EU. Perhaps the more probable outcome lies within the broad middle range, in the form of an attenuated attachment of the UK to the EU. Many such arrangements are enjoyed by the current non-EU members of the European Economic Area (EEA). In the longer term, another possible outcome might be the relaxation of trade restrictions between the North American economies and the EU as a whole. In his testimony before the ITC in the public hearing on this investigation, Senator Gramm of Texas stated that he would like to see that eventuality, when he said, "I want the United States to take the lead in calling for a free-trade agreement with Great Britain to break down protectionist barriers, to open up markets, to spread prosperity. And I believe that with our leadership that we can see the EU open for world trade."[3]

Approach and Organization of the Report

For the purposes of this study, it has been assumed that the contemplated free trade arrangement between the UK and the North American trading partners would follow the lines of the current North American Free Trade Agreement (NAFTA). Among other things, it would include an elimination of tariffs between the UK and the North American countries, and it would eliminate most nontariff barriers that are imposed at the border. The arrangement would not, by assumption, eliminate all measures claimed to be trade barriers. Not all such measures were eliminated under NAFTA.[4] For the sake of simplicity the analysis assumes that all trade-barrier elimination would take place at once, with no gradual phase-in provisions. This analysis uses two distinct sets of background assumptions. The first scenario assumes that, in essence, the UK would form

[1] See Appendix A for the request letter.

[2] Material cited in this and later sections of this chapter draws heavily on conversations held between members of the ITC staff and various parties conducted in London during the period of March 14 to March 22, 2000. Most parties to these discussions were assured of anonymity, at their request.

[3] USITC, *The Impact on the U.S. Economy of Including the United Kingdom in a Free Trade Arrangement with the United States, Canada, and Mexico: Hearing Before the Commission*, April 11, 2000, p. 15.

[4] Chapter 3 of this report details the tariff and nontariff barriers to trade between NAFTA members and the UK which have been identified by various parties. See the European Commission, *Market Access Database*, at *http://mkaccdb.eu.int/* (retrieved in March 2000) and Office of the United States Trade Representative, *National Trade Estimates on Foreign Trade Barriers: 2000*.

a free trade arrangement with North America while keeping intact all essential features of its membership in the EU. This scenario reflects a simple interpretation of the analysis requested by the Senate Finance Committee. The second scenario is based on the assumption that the UKwould sever its relationship with the EU, enter a free trade arrangement with North America, and that its subsequent trade relationships with the rest of the world would be the same as it now enjoys as a member of the EU. In other words, by assumption the UK would continue to be a party to the preferential trade relationships that the EU has formed with other countries.

The remainder of this report discusses the current conditions of trade among the four parties to the contemplated free trade arrangement among the UK, the United States, Canada, and Mexico and the potential effects of the proposed trade liberalization. The current chapter presents a background discussion on the position of the UK as a member of the EU. This discussion draws heavily on opinions expressed to members of the ITC study team during a trip to the UK in March 2000, and on selected items from the popular press and specialized reports, mostly in the UK. Chapter 2 contains an overview of recent trends in trade between the UK and North America, as well as a discussion of the UK and European trade with non-EU countries. Chapter 2 also provides a more detailed discussion of the foreign investment relationship between the UK and the United States. Chapter 3 provides a more detailed discussion of trade in key industries, with a preliminary compilation of barriers to trade and investment. Chapter 3 draws on data from the European Commission and the Office of the United States Trade Representative, previously cited, as well as on a telephone survey conducted for this study by ITC staff. Chapter 4 discusses the likely effects on the United States and the UK of eliminating tariff and selected nontariff barriers to trade between the UK and North America.

United Kingdom and the European Union

The present EU (heir to the European Coal and Steel Community, European Economic Community and European Atomic Energy Community) has been shaped by numerous decisions, regulations, directives, legal judgments, and additional treaties.[5] At its founding, the European Communities adopted among their main goals the provision of "four freedoms" of movement within their area: goods, services, workers, and financial transactions. These basic freedoms have been augmented over the years, and today the "*Acquis Communitaire*," or total body of law contained in EU treaties, legislation and interpretation, profoundly affects many commercial and social areas of the European common market. Many domestic laws are shaped by EU membership, which increasingly regulates business, social, health, safety, and other norms in Western Europe. In 1993, the European Communities became the European Union, defined by three pillars of cooperation: commercial policy, foreign and security policy, and justice and home affairs. Since 1999, 11 of the 15 EU member states have functioned as a single currency area as well, adopting a common currency, the Euro.[6]

In addition to its extensive commercial, political and social roles, the EU is a customs union. All EU member states engage in foreign trade agreements as a bloc, coordinated by the European Commission.

The EU's Common External Tariff (CET) is based on an arithmetical average of the previous national duties of member states before they joined the Union, and is subject collectively to GATT and WTO commitments. Beyond the CET, the EU has concluded a variety of trade agreements with different countries. Most nations in the world (with a few exceptions, notably the United States and Japan) are included within comprehensive trade arrangements with the EU. The EU's most preferential foreign-trade arrangements are the concessions granted multilaterally to former colonies and dependent territories in the Cotonou Agreement (formerly Lome Convention).[7] Other foreign-trade agreements range in degrees of reciprocity and inscope. For many years, those agreements offered by the EU to the Mediterranean region have been most comprehensive, though in recent years association agree-

[5] The EU member states are: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

[6] Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain have adopted the Euro.

[7] Participants with the EU in the Fourth Lome Convention included: Angola, Antigua and Barbuda, Bahamas, Barbados, Belize, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, the Central African Republic, Chad, Comoros, Congo-Brazzaville, the Democratic Republic of Congo, Djibouti, Dominica, the Dominican Republic, Equatorial Guinea, Eritrea, Ethiopia, Fiji, Gabon, Gambia, Ghana, Grenada, Guinea, Guinea Bissau, Guyana, Haiti, the Ivory Coast, Jamaica, Kenya, Kiribati, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Papau New Guinea, Rwanda, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sao Tome and Principe, Senegal, the Seychelles, Sierra Leone, the Solomon Islands, Somalia, South Africa, Sudan, Suriname, Swaziland, Tanzania, Togo, Tonga, Trinidad and Tobago, Tuvalu, Uganda, Western Samoa, Vanuatu, Zambia, Zimbabwe.

ments with Eastern European countries, known as "Europe Agreements," have superseded the Euro-Mediterranean Association Agreements in scope and reciprocity.[8] The EU also has concluded preferential cooperation agreements with many nations, but these are more limited in scope than association agreements.[9] Traditionally, three mechanisms have existed for the EU's trade with non-member European countries: the pre-1994 European Free Trade Area (EU-EFTA) relationship, the European Economic Area (EEA), and, since 1990, the association agreements (Europe Agreements) concluded with formerly Communist Central and East European countries.

United Kingdom as European Union Member

The United Kingdom has been a member of the EU since 1973. At times the UK has been slower than other members to adopt the voluntary aspects of EU policy, most notably the 1992 Social Chapter (adopted by the UK only in 1998), and, more recently, the Single European Currency. However, both private sector commercial and Government leaders in the UK note that the UK implements EU directives with alacrity, more fully and stringently than other EU member states. In fact, one businessman interviewed by the ITC in the course of this study characterized UK implementation of EU policy as "gold plated." Despite the presence of a long-standing debate on the merits of EU policy in the UK and the presence of strong "Eurosceptic", or critical views on the EU, the certainty of UK membership in the EU is generally not considered in political debate.

In the nearly 30 years that the UK has been a member of the European Community and the European Union, UK commercial and legal structures have evolved significantly as a result of this EU membership. One UK official estimates that two thirds of current UK laws reflect or implement EU policy. The EU's "four freedoms" have transformed the UK economy and commercial structures. Although UK trade with and investment in the other EU member states accounts for more than half of UK external trade, this figure had lagged behind other EU member states. As the UK and the EU evolve closer together, however, an increasing percentage of the UK's overall trade and investment is taking place within the EU. Nearly all UK business leaders and all UK Government officials contacted by the ITC in this investigation note the pervasive feeling that, politically and commercially, the UK's future is in Europe.

Thus, the scenario examined here, that the UK would negotiate a free trade arrangement with Canada, the United States, and Mexico, remains purely hypothetical both in the context of the UK's EU membership, and in practical thinking within the UK. Certain key aspects of the UK's relationship with the EU are examined next and are discussed in terms of the hypothetical scenario in which the UK was free to enter into bilateral free trade agreements.

Possible Uncertainty in the UK-EU Relationship

The hypothetical formation of a free trade arrangement between the UK and the North American countries raises questions as to the legal and economic nature of the subsequent UK-EU relationship. Most of the UK commercial and Government officials contacted by the ITC during this investigation expressed their opinions that a substantive alteration in the UK-EU relationship might be harmful to the UK.[10] The commercial uncertainty resulting from any alteration in this relationship might result in currency volatility and investment flight.

Were the UK to have a different relationship with the EU, the UK might not only face uncertainty in its trade and investment with the rest of the EU, but might also face uncertainty in its trade relationships with the rest of the world. Since 1973, the European Union has defined and negotiated the United Kingdom's external trade relations. Were the UK to alter its relationship with the EU, UK Government officials, business lead-

[8] Countries with which the EU currently has some sort of Association Agreement include: Algeria, Bulgaria, Cyprus, the Czech Republic, Egypt, Estonia, Hungary, Israel, Jordan, Latvia, Lebanon, Lithuania, Malta, Mexico, Morocco, the Palestinian Authority, Poland, Romania, Slovakia, Slovenia, Syria, Tunisia, and Yugoslavia.

[9] Countries with which the EU currently has (a very wide range of) Cooperation Agreements include: Argentina, Armenia, Bolivia, Brazil, Cambodia, Chile, Colombia, Costa Rica, El Salvador, Ecuador, Georgia, Guatemala, Honduras, Kazakhstan, the Kyrgyz Republic, Laos, Macau, Mexico, Moldova, Mongolia, Nepal, Nicaragua, Pakistan, Panama, Peru, Russia, San Marino, Singapore, South Africa, South Korea, Sri Lanka, Thailand, Turkmenistan, Ukraine, Uruguay, Uzbekistan, Venezuela, Vietnam, and Yemen.

[10] A number of UK business leaders suggest that any attempt to change the UK-EU relationship might prompt the EU to apply punitive tariffs and NTBs to UK goods and services. Sectors facing the largest potential for punitive action, according to UK business leaders, include financial services, public procurement, agriculture, and trade in basic goods and services. Some UK academic trade specialists, however, report that the EU would be unlikely to discriminate against UK goods and services, given the EU's high volume of trade and investment with the UK. It is not clear that the EU could impose tariffs or erect other barriers on the UK in excess of its WTO-bound rates and commitments.

ers, and trade specialists note that the UK might face having to renegotiate *all* its external trade relations. UK business leaders feel that this would be extremely harmful to the UK, as the UK would not be able to renegotiate these relations from a position as strong as that of the EU as a whole.

Several UK business leaders noted that the adjustment period following any alteration in the UK-EU relationship, particularly before any hypothetical UK-US/Canada/Mexico FTA would become effective, could be extremely damaging to the UK economy.

Foreign Direct Investment

According to UK Government officials, trade specialists and business leaders contacted in this investigation, changes in inward investment would be one of the most dramatic results of any alteration in the UK-EU relationship. A small number of trade specialists said that investment in the UK would rise were the UK to alter its relationship with the EU and decrease the UK's regulatory burden. However, most academic trade specialists and UK business leaders, and all UK Government officials interviewed, said that FDI would suffer if any changes were to occur in the UK-EU relationship. Many UK Government, business, and union contacts reported that evidence exists from static inward investment figures for 1998 and in highly publicized remarks of Japanese automobile manufacturers that the UK stands to lose inward investment if it does not join the Single European Currency. UK business leaders and Government officials noted that if the UK can lose investment by not adopting the Euro, then it can certainly lose investment through any alteration of the UK-EU relationship. In contrast, other UK trade specialists said no evidence exists that joining the Single European Currency is necessary to attract investment into the UK.

UK Government officials and business leaders agreed that foreign companies invest in the UK for a variety of reasons, including favorable tax and regulatory structures, low wages (relative to the EU as a whole), linguistic preference, the UK's geographical location, and its business-friendly legal structure. UK business leaders and trade specialists are divided on the importance of EU membership, given these independent factors, however. Some reported that the UK would remain an attractive investment destination no matter what its relationship with the EU. Others said that these factors make the UK an attractive destination for investment only as an EU member. According to this view, shared by all UK Government officials contacted, foreign companies invest in the UK to be within the Common External Tariff, and to allow companies access (as a European subsidiary) to political decision makers within the EU. All UK Government contacts felt that EU membership was an important factor in the UK's ability to attract foreign investment. One official noted that were the UK to alter its relationship with the EU, foreign investment might move to neighboring Ireland, another English-speaking EU member with relatively low taxes.

Regulatory Burden

Some UK economists reported that the EU imposes a heavy regulatory burden that harms UK competitiveness. Other economists, however, and most UK commercial figures and all UK Government and union officials interviewed, reported that the EU-mandated regulatory burden does not impose a significant cost. One area of disputed regulatory burden is the EU's concern with social policies. According to union officials, the main burdens stemming from EU social regulation are the Collective Redundancies Directive concerning redundancy payments, EU mandates requiring companies to meet with unions in certain circumstances, and the EU Acquired Rights Directive protecting the rights of employees when their companies are taken over. One union official noted that when a UK Government department recently undertook a study of the business costs of implementing the EU Social Charter, which addresses a broad range of workplace rights, it was forced to conclude that all of its results were highly speculative because of the difficulty in isolating and measuring the costs of social regulations.

Other economists commented on the regulatory burden posed by the EU's liberalization in various markets, such as aviation, agriculture, cultural services, financial services, banking, telecommunications, and energy. Some economists reported that the UK would liberalize faster and more extensively in these sectors if it had a different relationship with the EU. Many specialists interviewed acknowledged the UK's liberal outlook in these sectors, but concluded that the UK is a liberalizing influence on the EU. Some UK business leaders and Government officials reported that the EU is now more liberal in these areas than it was 10 years ago, and some UK leaders explained this change by citing the UK's liberalizing influence. Some economists reported that the UK does not have a strong influence in the EU, but this view was disputed by other industry and Government officials. A number of UK Government contacts reported that the UK's liberalizing influence in the EU ultimately benefits the

United States by creating additional markets for foreign goods and services in the EU.

Agriculture

Many UK business leaders, union officials, Government officials and trade economists reported that UK agriculture would be particularly affected by any alteration in the UK-EU relationship. Agriculture in the EU is governed by the Common Agricultural Policy (CAP). The CAP regulates agricultural prices using three methods: price supports, achieved by creating tariff barriers, providing export subsidies and purchasing excess supplies; taxpayers' support, channeled directly to farms, based on the number of animals held and land acreage; and a series of price controls-price supports or direct payment. The EU is currently in the middle of its second reform in 10 years, called "Agenda 2000." This program entails price reductions and increases compensation given to farmers for lost production.

The reported result of these agricultural policies is artificially high food prices in the EU and a distorted agricultural sector. There is virtual consensus among those interviewed that if the CAP or similar price supports were not in place in the UK, very few sectors of UK agriculture would be able to supply world markets at world prices. Some UK economists and Government officials report potential exceptions where UK producers might remain competitive; these exceptions, including some dairy sectors, luxury agricultural goods like whiskey, and organic food.

The UK is a net contributor to the CAP, and some UK trade specialists conclude from this fact that the UK would benefit from altering its relationship with the EU. Some asserted that if the UK could apply a percentage of its CAP contribution to support UK agriculture directly, producers might remain competitive even outside the CAP. Others, who advocate an alteration in the UK-EU relationship, however, indicated that an inherent part of such an alteration would be a rationalization of UK agriculture. Some economists pointed out that even if UK agriculture suffered profoundly as a result of an alteration in the UK-EU relationship, there would be UK benefits in the form of lower food prices.

UK/EU - North American Trade Barriers

Most UK business and Government officials contacted by the ITC believe there are no significant trade barriers between the UK and Canada, Mexico, and the United States. Several UK Government officials noted that the 1999 EU-Mexico Association Agreement has eliminated many tariffs between the UK and Mexico. A minority of UK business and Government contacts reported that while trade is generally open between the UK/EU and Canada, the EK/EU and Mexico and the UK/EU and the United States, some sectors still face barriers. They were uncertain as to whether these barriers would be lowered by an FTA.

Some reported barriers included differing standards, different capital requirements for insurance companies, government regulation and agricultural subsidy regimes, the U. S. Jones Act regulating shipping between American ports, the U. S. "Open Skies" policy regulating foreign airlines' access to American routes, tariff peaks in protected industries, and health and safety rules.[11]

Ability of an FTA to Address Trade Barriers

Many of those interviewed for this investigation reported that close cultural links between the UK and Canada and the UK and United States enhance trade and investment. They cited similar business cultures, the English language, similar law and tax structures, and shared liberalization in telecommunications, financial sectors, and energy as stimulants to trade between the UK, United States and Canada. A minority of UK academics contacted by the ITC reported that, due to these similarities, UK business would benefit from further trade liberalization with Canada, Mexico and the United States.

Many UK Government and union officials, however, noted that an FTA might not eliminate many trade barriers because peak tariffs might remain and because many existing trade disputes might fall outside of the provisions of an FTA. One UK Government official noted that such an FTA would impose additional regulatory burdens on UK industry, struggling to meet both EU and North American regulations. A minority of UK economists, however, reported that UK industry could easily meet all regulatory requirements, regardless of the UK's trade status.

[11] One UK Government official felt that if the UK were able to enter a bilateral FTA, it might take a stronger line on genetically modified organisms than it does at present.

CHAPTER 2
North Atlantic Trade and Investment Relationship

This chapter provides an overview of the trade and investment relationships among the United Kingdom, United States, Canada, and Mexico during the 1990s. First, the UK's trade and investment flows with North American partners are examined, with a special emphasis on the U.S.-UK bilateral relationship; this discussion addresses both the trade relationship and the strong bilateral investment positions the two countries hold with respect to one another. Second, the UK's relationship with and membership in the EU, which collectively forms its largest trading partner, is also presented to provide perspective on the UK's relationship with North America. The chapter concludes with a discussion of the EU's extensive array of preferential trade relationships with other parties, as an indication that such liberal trade connections are not limited by the EU to its membership alone.

United Kingdom Trade and Investment with North America

The United States is the UK's largest single trading partner, accounting for 13 percent of UK trade and nearly 90 percent of UK trade with North America. The United States is an even more significant investment partner, accounting for 27 percent of UK direct investment abroad and 39 percent of foreign direct investment in the UK, as of 1998.

Trade

Overview

From 1990 to 1998, UK exports to the world increased 46 percent to $289 billion, and UK imports rose 48 percent to $323 billion (see table 2-1).[1] In every year except 1991, the UK registered a global trade deficit.

Table 2-1 and figure 2-1 show UK trade (exports and imports) with North America and with the other 14 members of the EU (EU14).[2] The majority of the UK's trade is accounted for by the EU14. In 1998, seven of the UK's top ten export markets and seven out of the UK's ten leading import sources were EU members.[3] During 1990-98, the EU accounted for, on average, 55 percent of the value of the UK's exports and 57 percent of the UK's imports. This trade represented an increase of more than 5 percent for UK exports and 2 percent for UK imports from the average shares recorded during the previous decade. However, between 1990 and 1998, UK exports to and imports from the EU14 grew less rapidly than total UK exports and imports. During that period, UK exports to the EU grew 46 percent and imports by 37 percent. The shares of both UK exports and imports accounted for by the EU fluctuated erratically through the entire period.

The North American share of UK trade remained fairly constant during 1990-98, but one percentage point below the average share recorded during 1980-89 (see table 2-2). Between 1990 and 1998, UK exports to North America rose steadily by 47 percent to $42 billion, after an initial decline in 1991. Such exports fluctuated between 12 percent and 15 percent of total UK exports throughout the period. This share declined steadily in 1994-96, and climbed in 1997 and 1998.

[1] Statistics Canada is the principal source of the trade data presented in this chapter. The most recent year for which data are available is 1998. Statistics Canada collects export and import data reported by individual countries. These data generally are not consistent for a variety of reasons, including timing differences, valuation differences, and the handling of transshipments. Statistics Canada ensures that the trade data are consistent; for example, UK exports to the United States are equal to U.S. imports from the UK.

[2] The 15 member states of the EU are: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the UK. Austria, Finland, and Sweden joined the EU on Jan. 1, 1995.

[3] International Monetary Fund (IMF), *Direction of Trade*, 1999.

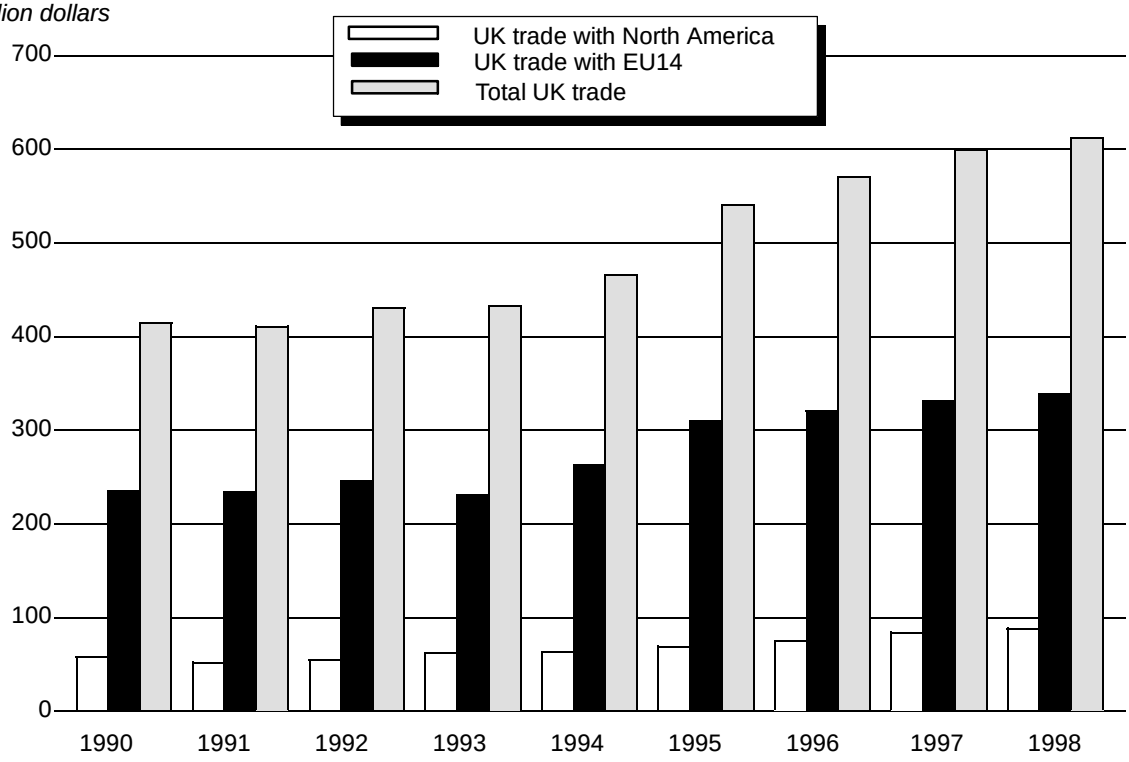
Table 2-1
United Kingdom trade with the United States, Canada, Mexico, and EU14, 1990-98
(Million dollars)

Item	1990	1991	1992	1993	1994	1995	1996	1997	1998
Exports:									
World	197,600	205,599	210,827	210,117	229,930	265,369	281,067	291,120	288,845
North America	28,577	24,451	26,258	30,276	32,385	34,485	36,318	40,994	42,011
United States	23,657	20,140	22,072	25,823	27,766	29,989	31,329	35,721	36,626
Canada	4,418	3,765	3,589	3,783	3,893	3,967	4,338	4,327	4,363
Mexico	502	547	597	670	725	529	650	946	1,021
EU14	108,377	115,950	118,690	107,832	125,331	149,167	155,461	157,941	157,511
Imports:									
World	217,432	205,587	219,703	222,343	236,200	275,204	289,788	308,263	322,733
North America	29,581	27,689	28,507	32,100	31,245	34,909	38,483	43,129	46,216
United States	25,744	24,323	25,234	29,146	28,242	31,260	34,688	39,256	42,314
Canada	3,553	3,122	3,023	2,701	2,685	3,177	3,300	3,257	3,274
Mexico	285	244	250	253	319	472	495	616	628
EU14	127,212	118,888	127,811	123,530	137,750	160,695	164,953	173,972	181,924
Trade balance:									
World	(19,832)	11	(8,876)	(12,226)	(6,269)	(9,834)	(8,721)	(17,143)	(33,888)
North America	(1,004)	(3,238)	(2,249)	(1,824)	1,139	(424)	(2,165)	(2,135)	(4,205)
United States	(2,086)	(4,183)	(3,163)	(3,323)	(476)	(1,271)	(3,359)	(3,534)	(5,688)
Canada	865	643	566	1,082	1,208	790	1,038	1,070	1,089
Mexico	218	302	347	417	407	57	156	330	394
EU14	(18,835)	(2,938)	(9,121)	(15,698)	(12,419)	(11,527)	(9,491)	(16,031)	(24,413)

Source: Statistics Canada, *World Trade Analyzer*, CD-ROM, 1999 and 2000.

Figure 2-1
UK trade with North America and the EU14, 1990-98

Billion dollars



Source: Compiled from official statistics of Statistics Canada, *World Trade Analyzer*, CD-ROM, 1999 and 2000.

Table 2-2
UK and EU14 trade with North America, share of total, 1990-98

(Percent)

Year	UK Exports	EU14 Exports	UK Imports	EU14 Imports
1990	14.5	7.4	13.6	7.5
1991	11.9	7.0	13.5	7.8
1992	12.5	7.0	13.0	7.2
1993	14.4	7.7	14.4	6.9
1994	14.1	7.8	13.2	6.8
1995	13.0	7.0	12.7	6.7
1996	12.9	7.2	13.3	6.7
1997	14.1	8.1	14.0	7.2
1998	14.5	8.7	14.3	7.2

Source: Statistics Canada, *World Trade Analyzer*, CD-ROM, 1999 and 2000.

UK imports from North America increased 56 percent to $46 billion between 1990 and 1998. Such imports have risen steadily since 1991, except in 1994 when there was a 3 percent decline. The North American share of UK imports fluctuated during 1990-98 between 13 percent and 14 percent. The share increased in each year during 1996-98 compared to 1995, which was the lowest share recorded since the 1980s.

The UK trades more with North America, as a percent of total trade, than do the other 14 EU member states as a whole. Table 2-2 shows that during 1990-98, the UK traded almost twice as much with North America as did the other EU member states together (as a percent of total trade). This relationship between the UK's and the EU's respective levels of trade with North America remained fairly constant throughout the 1990-98 period.

The United States is the UK's largest single trading partner in terms of the value of both exports and imports.[4] Throughout the 1990s, the United States has accounted for a growing share of both UK exports and imports with North America, reaching a high of 87 percent of UK exports to North America in 1998 and 92 percent of UK imports from North America in 1998. In 1998, Canada was the UK's 16th largest export market and 15th largest source of imports, whereas Mexico ranked outside the top 30 traders.[5] Thus, trends in UK trade with North American partners taken together largely reflect UK trade with the United States.

In 1998, the United States accounted for 13 percent of the value of the UK's exports as well as the UK's imports. UK exports to the United States increased gradually over 1990-98 by 55 percent to $37 billion. UK imports from the United States climbed erratically between 1990 and 1998 by 64 percent to $42 billion in 1998. Over the same period, total UK exports and total UK imports grew more slowly–by 46 percent and 48 percent, respectively. The U.S. share of total UK trade fluctuated during 1990-98 between 11 and 13 percent, reaching a high of 13 percent in 1998. The UK registered a trade deficit with the United States in each year during 1990-98.

In 1998, the UK was the United States' sixth largest trading partner and its second largest trading partner within the EU, following Germany.[6] That year the UK ranked as the fourth largest destination for U.S. exports and the sixth largest source of U.S. imports.[7] Between 1990 and 1998, U.S. trade with the UK increased 60 percent, slower than the 79 percent increase in total U.S. trade (figure 2-2). During that period, the UK share of total U.S. trade remained fairly stable, fluctuating between a high of 5.3 percent recorded in 1990 and a low of 4.3 percent in 1995.

Between 1990 and 1998, U.S. trade with the EU15 increased 57 percent, just slightly below the 60 percent growth in U.S. trade with the UK. Accordingly, the UK's share of U.S. trade with the EU15 remained fairly constant over the 1990-98 period. The UK represented more than one-fifth of U.S. trade with the EU15 in each year between 1990 and 1998.

Canada, the UK's second largest North American trading partner, accounted for less than 2 percent of UK trade during 1990-98, and its share is steadily declining. UK exports to Canada fell from a 1990s high of 2.2 percent of all UK exports in 1990 to 1.5 percent in each year during 1995-98. Likewise, Canada's share of UK imports declined from a high of 1.6 percent in 1990 to a low of 1.0 percent in 1998. The UK registered a trade surplus with Canada throughout the period.

The UK was Canada's third largest export market and fifth largest source of imports in 1998.[8] However, with the United States accounting for the overwhelming portion of Canadian trade, the UK share remains small and declining; the UK's share of Canadian exports steadily declined from 2.6 percent of Canadian exports in 1990 to 1.4 percent in 1997 and 1998. Likewise, the UK's share of Canadian imports fell steadily from 3.6 percent in 1990 to 2.1 percent in 1998.

Mexico accounts for an even smaller portion of UK trade. UK exports to Mexico accounted for 0.3 percent of total UK exports in all years during 1990-94, declined to 0.2 percent in 1995-96, and then rose gradually to 0.4 percent in 1998. UK imports from Mexico rose from 0.1 percent of total imports in 1990-94 to 0.2 percent in 1995-98. UK trade with Mexico fluctuated during 1990-98, largely due to the Mexican peso crisis, which resulted in a 27 percent decline in the value of UK exports to Mexico in 1995. Otherwise, UK exports and imports with Mexico increased gradually and resulted in a trade surplus for the UK throughout the period.

The UK ranked as Mexico's 6th largest export market and 12th largest source of imports in 1998.[9] However, like Canada, the United States accounts for the vast majority of Mexico's trade. As a result, the UK

[4] Ibid. However, according to the UK's own statistics in British pounds sterling, Germany has been the UK's largest source of imports in each year during 1992-99.

[5] IMF, *Direction of Trade*, 1999.

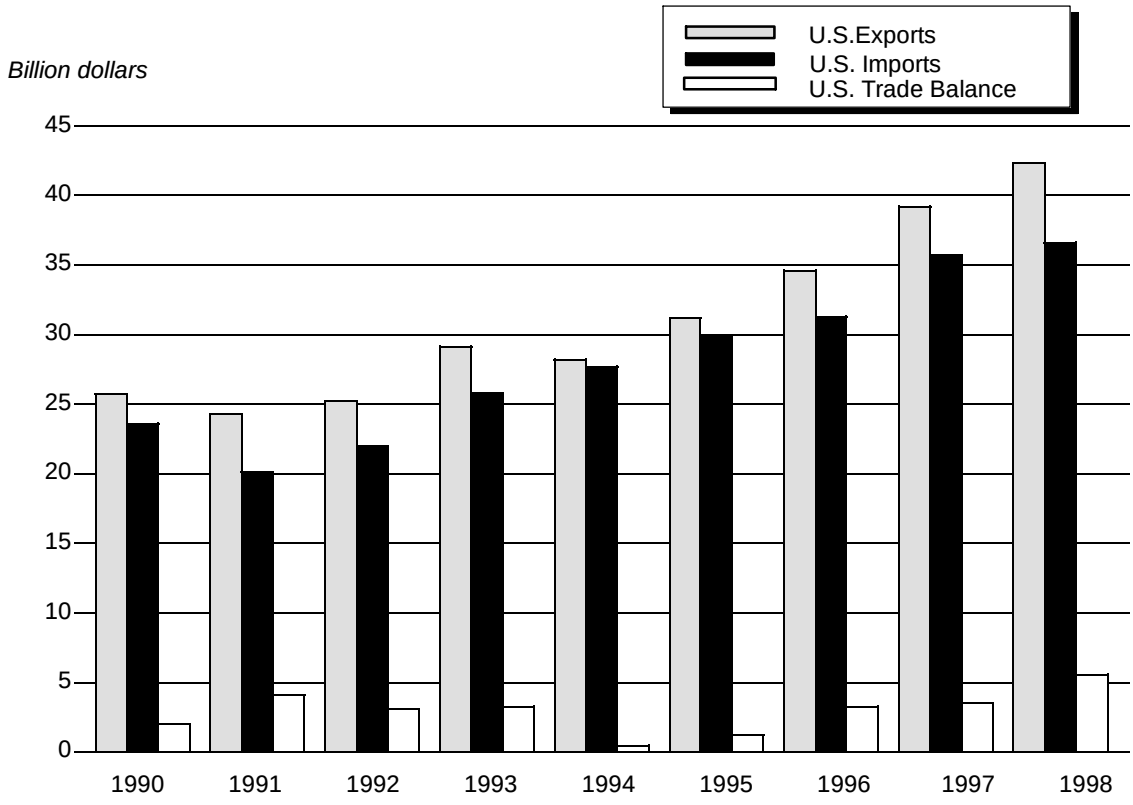
[6] IMF, *Direction of Trade*, 1999.

[7] Ibid.

[8] Ibid.

[9] IMF, *Direction of Trade*, 1999.

Figure 2-2
U.S. trade with the United Kingdom, 1990–98



Source: Compiled from official statistics of Statistics Canada, *World Trade Analyzer*, CD-ROM, 1999 and 2000.

has accounted for 1 percent or less of Mexico's exports and imports since 1992.

Investment

Aggregate Investment Stocks and Flows

In 1998, the UK was the second largest global investor after the United States and the second largest recipient of foreign direct investment after the United States.[10] In addition to their important global investment role, the UK and the United States are each other's largest foreign investor. Each country's share of the other's inward and outward investment positions far outweighs its share of the other's total trade.

The stock of U.S. direct investment abroad[11] and to the UK increased significantly from 1990 through 1997, although the share of total U.S. outflows to the UK declined during that same time period. In 1997, the UK accounted for 16 percent of U.S. direct investment abroad (table 2-3). Between 1990 and 1997, the stock of U.S. direct investment in the UK grew by 91 percent to nearly $139 billion. Over the same time period, the stock of U.S. direct investment abroad grew

[10] United Nations Conference on Trade and Development, *World Investment Report 1999*, New York, 1999, tables B.1, B.2, B.3, and B.4, pp. 477-500.

[11] There are three components of foreign direct investment (FDI): equity capital, reinvested earnings, and intracompany loans. FDI flows are reported annually and comprise capital provided by a foreign direct investor to an FDI enterprise, or capital received from an FDI enterprise by a foreign direct investor. FDI stock generally refers to the cumulative investment position over time of the value of the share of capital and reserves attributable to the parent enterprise, plus the net indebtedness of affiliates to the parent enterprise. Changes in the investment position do not directly reflect changes in the flows due to a variety of reasons, including depreciation, drawing down of inventories, and measurement differences.

Table 2-3
United States investment stocks, 1990-97

(Billion dollars)

Item	1990	1991	1992	1993	1994	1995	1996	1997[1]
Outward position:								
Total	430.1	467.8	502.1	564.3	640.3	717.6	777.2	860.7
North America	79.8	83.2	82.4	85.1	94.2	101.4	111.2	125.3
Canada	69.5	70.7	68.7	69.9	78.0	85.4	91.3	99.9
Mexico	10.3	12.5	13.7	15.2	16.2	16.0	19.9	25.4
EU	183.9	203.3	213.8	244.5	266.0	315.4	337.2	369.0
United Kingdom	72.7	79.8	85.2	109.2	121.3	122.8	122.7	138.8
Inward position:								
Total	394.9	419.1	423.1	467.4	480.7	535.6	594.1	681.7
North America	30.1	37.5	39.1	41.6	43.3	47.5	56.2	65.7
Canada	29.5	36.8	37.8	40.4	41.2	45.6	54.8	64.0
Mexico	.6	.7	1.3	1.2	2.1	1.9	1.4	1.7
EU	228.5	236.4	235.2	261.6	267.0	302.2	334.7	381.9
United Kingdom	98.7	100.1	90.9	98.7	98.7	116.3	121.3	129.6

[1] Preliminary.

Source: OECD, *International Direct Investment Statistics Yearbook*, 1998.

100 percent, to an estimated $861 billion in 1997. As a result, the UK's share of the U.S. outward investment-position declined very slightly over the period, from an average of 18 percent over the period 1990-93 to an average 17 percent over the 1994-97 period. The UK represented 38 percent of the U.S. outward direct investment position in the EU in 1997, a decline from the high of 46 percent recorded in 1994 and the 40 percent share recorded during 1990-92.

The UK accounted for 20 percent of the U.S. inward investment position in 1996, and 19 percent in 1997, according to preliminary statistics. Total foreign direct investment in the United States grew by 73 percent from 1990 to 1997 to an estimated $682 billion in 1997. Over the same period, the stock of UK direct investment in the United States grew just 31 percent, to almost $130 billion in 1997. Accordingly, the UK share of U.S. inward investment declined gradually during the period, from a high of 25 percent in 1990 to a low of 19 percent in 1997. The UK's share of EU direct investment in the United States also declined, falling from a high of 43 percent of EU direct investment in the United States in 1990 to 36 percent in 1996 and 34 percent in 1997. The share of total U.S. investment outflows to the UK declined between 1990 and 1997, from 20 percent (1990-93) to 16 percent (1994-97) (table 2-4).[12] Over the same period, the EU's share of total U.S. outflows grew from 40 percent to 47 percent. The share of total U.S. inflows from the UK increased between 1990 and 1997, from 15 percent (1990-93) to 17 percent (1994-97). Over the same period, the share accounted for by the EU also grew, from 54 percent to 58 percent.

The United States is the largest destination for UK direct investment abroad, although the U.S. share of UK outflows has declined in recent years.[13] In 1996, the United States accounted for over 27 percent of the UK's outward investment position (table 2-5). However, the U.S. share of the UK's outward position has steadily declined during the 1990s, from a high of 38 percent of total UK direct investment abroad in 1990, to a low of 27 percent in 1996. Over the same time period, the EU14's share of the UK's outward position increased steadily, from a low of 27 percent in 1990 to a high of 43 percent in 1996. Until 1993, the UK's direct investment in the United States was larger than

[12] Investment outflows and inflows fluctuate widely from year to year, reflecting fluctuations in large acquisitions and mergers. As a result, investment flows are analyzed by using annual averages.

[13] These data were reported to the Organization for Economic Co-operation and Development (OECD) by the UK Government in British pounds sterling and were converted to U.S. dollars using annual average exchange rates reported by the IMF. The U.S. and UK investment data do not correspond for a variety of reasons, including timing and measurement differences.

Table 2-4
United States investment flows, 1990-97

(Billion dollars)

Item	1990	1991	1992	1993	1994	1995	1996	1997[1]
Outflows:								
Total	31.0	32.7	42.6	78.2	73.3	92.1	74.8	114.5
North America	5.8	3.6	3.4	6.1	10.5	11.5	10.0	16.6
Canada	3.9	1.3	2.1	3.6	6.0	8.6	7.3	10.7
Mexico	1.9	2.3	1.3	2.5	4.5	2.9	2.7	5.9
EU	4.3	18.0	15.4	38.2	31.2	48.8	32.4	52.9
United Kingdom	(.2)	4.7	6.2	25.4	9.6	13.8	12.1	22.4
Inflows:								
Total	48.4	22.8	19.2	50.7	45.1	58.8	76.5	90.7
North America	2.0	0.3	2.0	3.7	5.7	4.5	8.2	9.5
Canada	1.8	0.1	1.3	3.8	4.6	4.8	8.2	9.4
Mexico	0.2	0.2	0.7	(.1)	1.1	(.3)	0.4	0.1
EU	21.9	11.5	6.6	36.8	24.6	35.1	48.1	50.3
United Kingdom	4.5	3.5	(1.1)	14.1	10.1	16.3	11.0	8.6

[1] Preliminary.

Source: OECD, *International Direct Investment Statistics Yearbook*, 1998.

Table 2-5
United Kingdom investment stocks, 1990-96

(Million dollars)

Item	1990	1991	1992	1993	1994	1995	1996
Outward position:							
Total	212,263	219,570	258,845	249,080	269,652	310,470	326,576
North America	93,083	92,094	109,387	97,567	91,894	107,188	96,190
United States	81,261	80,272	96,552	86,180	83,877	99,125	88,951
Canada	11,099	11,064	11,945	10,757	7,506	8,516	7,101
Mexico	723	756	890	629	512	552	865
EU	56,416	60,713	71,713	80,976	94,687	114,927	141,309
Inward position:							
Total	188,750	197,063	201,989	181,754	185,838	203,445	218,410
North America	85,466	86,455	88,392	80,564	83,363	91,207	89,823
United States	78,141	78,622	81,215	74,405	76,318	87,021	84,257
Canada	7,324	7,833	7,177	6,160	7,035	4,186	5,566
Mexico[1]							
EU	60,150	67,251	69,813	60,481	61,261	68,654	72,418

[1] The United Kingdom did not officially record inward investment from Mexico during 1990-96.

Source: OECD, *International Direct Investment Statistics Yearbook*, 1998.

its stock in the EU14, but that changed in 1994. During 1994-96, the UK's stock of direct investment in the EU14 was greater than that in the United States.

Similar to the U.S. trend, the share of UK direct investment in Canada also has steadily declined, from a high of 5 percent in 1990 to a low of 2 percent in 1996. The share of the UK's outward position in Mexico remained stable during 1990-96, accounting for 0.2-0.3 percent of total UK direct investment abroad.[14]

In 1996, the United States accounted for almost 39 percent of the stock of foreign direct investment in the UK, larger than the share accounted for by all 14 EU member states together. During 1990-96, the U.S. share of the UK's inward position remained fairly constant, rising to a high of 43 percent in 1995, just one year before its lowest recorded share of 39 percent in 1996. The U.S. share averaged 41 percent for the period. The EU14 accounted for 33 percent of the UK's inward position in 1996, a share that also remained fairly constant between 1990 and 1996.

Canada accounted for 2.5 percent of the UK's inward investment in 1996. Canada's share declined slightly between 1990 and 1996, from 4 percent in 1990 to less than 3 percent in both 1995 and 1996. The UK did not officially register inward investment from Mexico during 1990-96.

The share of total UK outflows to the United States declined slightly between 1990 and 1997, from 29 percent (1991-93) to 28 percent (1994-96) (table 2-6). Over the same time period, the EU's share grew from 41 percent to 45 percent. The share of total UK inflows coming from the United States increased between 1990 and 1996, from 39 percent (1991-93) to 47 percent (1994-96). Over the same period, the EU's share declined, from 37 percent to 31 percent.

Sectoral Investment

This section is devoted to a description of U.S. direct investment in the UK and UK direct investment in the United States for the year 1997, based on data gathered by the U.S. Department of Commerce's Bureau of Economic Analysis (BEA), which is more complete in the treatment of sectoral investment than the OECD data. The BEA data underlie the partial equilibrium analysis of the potential effects of tariff changes on FDI undertaken in chapter 4.

Over 58 percent of the assets of U.S. affiliates in the UK ($537.2 billion) are in the finance, insurance, and real estate industries. These are unusually capital-intensive sectors which together have an asset-to-sales ratio of over 13 to 1 (Table 2-7).[15] Most of the rest of U.S. direct investment assets in Britain are in manufacturing ($217.5 billion, or 24 percent). Using the BEA's sectoral classification, which employs a narrow definition of services, manufacturing accounts for the largest share of sales of U.S. affiliates in the UK, at $131.9 billion, about 40 percent of the total. Using the broader definition of services employed in chapter 3, which includes financial services and wholesale trade, sales of U.S. affiliates in services were approximately $141.6 billion, or 43 percent of the total, and thus larger than manufacturing.[16]

Taken as a group, finance, insurance, and real estate account for over 40 percent of UK-owned direct investment assets in the United States ($186.8 billion) with manufacturing in second place at 32 percent of assets ($143.6 billion) (table 2-8). Measured by sales rather than assets, manufacturing is the largest of the BEA-defined sectors with 44 percent of total sales ($114.3 billion), with chemicals and allied products (including pharmaceuticals) being the largest category within manufacturing. Again, if the broader definition of services employed in chapter 3 is used, sales of UK-owned services affiliates in the United States amounted to $123.4 billion (48 percent) of the total, again somewhat larger than manufacturing. Overall, approximately 69 percent of sales of U.S. affiliates in the UK are for the local British market, 5 percent are directed to the United States, and 26 percent are exported to third locations.

The EU may be the most important of these third locations, though data on these locations are not directly available. The destination of sales varies by industry (table 2-9). For example, U.S. affiliates producing industrial machinery and equipment are especially export

[14] The United Kingdom did not officially record inward investment from Mexico during 1990-96.

[15] In this and in other tables, some data elements are suppressed due to disclosure policies of the U.S. Department of Commerce. Other data published by Commerce permit some inferences as to the approximate magnitude of the suppressed data elements, which can be used for purposes of analysis.

[16] This comparison between manufacturing and services, as well as the similar comparison in the following paragraph, exclude FDI activities classified by the BEA under "petroleum," which is an aggregate of mining, manufacturing, and services activities from the standpoint of national-income accounting.

Table 2-6
United Kingdom investment flows, 1990-96

(Million dollars)

Item	1990	1991	1992	1993	1994	1995	1996
Total	18,043	16,466	17,844	25,325	29,623	43,573	34,379
North America	1,733	4,517	2,345	11,303	7,560	19,292	3,225
United States	84	3,955	2,332	11,227	7,514	18,783	3,308
Canada	1,601	563	(189)	8	(20)	385	(264)
Mexico	48	0	201	68	66	125	181
EU	9,113	6,933	8,144	9,254	12,672	14,928	20,374
Inflows:							
Total	30,617	14,895	15,625	14,814	9,260	7,320	25,118
North America	8,615	3,790	6,536	7,777	2,898	5,123	11,683
United States	9,091	3,323	6,617	7,726	3,273	5,376	10,923
Canada	(473)	467	(81)	51	(375)	(253)	761
Mexico[1]	(4)	([1])	([1])	([1])	([1])	([1])	([1])
EU	13,617	8,100	6,054	2,405	4,834	2,057	6,077

[1] The United Kingdom did not officially record investment inflows from Mexico during 1991-96.

Source: OECD, *International Direct Investment Statistics Yearbook*, 1998.

Table 2-7
U.S. direct investment in the United Kingdom, by industries, nonbank foreign affiliates of nonbank U.S. parents, 1997

(Million dollars)

Industry	Assets	Sales
All industries	923.2	337.9
Petroleum	56.7	59.8
Manufacturing	217.5	131.9
Food and kindred products	22.5	14.8
Chemicals and allied products	([1])	22.9
Primary and fabricated metals	([1])	5.1
Industrial machinery and equipment	32.7	30.8
Electronic and other electrical equipment	([1])	([1])
Transportation equipment	([1])	25.0
Other manufacturing	26.6	([1])
Wholesale trade	14.3	41.1
Finance, insurance, real estate	537.2	39.5
Other services	29.1	30.0
Business services	18.3	19.4
Other	10.8	10.6
Communication	20.6	6.9
Other industries[2]	47.9	28.8

[1] Item suppressed for disclosure reasons.

[2] Includes agriculture, forestry and fishing; mining/construction; transportation; electric, gas, and sanitary services; and retail trade.

Source: Bureau of Economic Analysis, U.S. Department of Commerce, *U.S. Direct Investment Abroad*; *Operation of U.S. Parent Companies and their Foreign Affiliates, Preliminary 1997 Estimates*.

Table 2-8
UK-owned foreign direct investment in the United States, by industries, 1997
(Billion dollars)

Industry	Assets	Sales
All industries	454.1	258.8
Petroleum	24.8	31.4
Manufacturing	143.6	114.3
Food and kindred products	26.5	15.2
Chemicals and allied products	45.1	33.1
Primary and fabricated metals	6.9	6.9
Industrial machinery and equipment	12.0	12.3
Electronic and other electrical equipment	9.3	6.8
Transportation equipment	8.1	8.1
Other manufacturing	35.6	31.9
Wholesale trade	16.6	23.1
Retail trade	7.5	12.1
Finance, excluding depository institutions	100.5	11.4
Insurance	79.5	19.4
Real estate	6.8	1.7
Services	22.3	14.6
Business services	9.4	7.5
Other	12.9	7.1
Other industries[1]	52.4	30.8

[1] Includes agriculture, forestry, fishing; mining; construction; transportation; communication and public utilities.

Note.—SIC-based data are presented to faciliate comparison with U.S. direct investment abroad. Beginning in 1997, primary reporting of data on foreign direct investment in the United States utilizes North American Industries Classification System (NAICS).

Source: Bureau of Economic Analysis, U.S. Department of Commerce, *Foreign Direct Investment in the United States: Preliminary Results from the 1997 Benchwork Survey*.

oriented, in terms both of sales to the United States (11 percent) and to third markets (53 percent). At the other extreme, 87 percent of sales of U.S. affiliates in food and kindred products (including beverages and tobacco) are concentrated in the local British market. U.S. exports to U.S. majority-owned affiliates in the UK were about $16.5 billion in 1997, with U.S. imports of $8.3 billion (table 2-10).[17]

There is a high degree of vertical integration between U.S. parents and their UK affiliates in the sectors of electronic and electrical equipment and wholesale trade. U.S. exports are about 18 percent of final sales for these industries, compared to 5 percent on the average. This vertical integration could take the form either of semifinished components shipped for final assembly or of finished goods shipped to a distribution outlet. UK affiliates in industrial machinery and equipment are the most likely to export to the United States, with 9.6 percent of their outputs appearing as U.S. imports, compared to 2.6 percent for all U.S. affiliates in Britain.

Trade of UK-owned affiliates in the United States with the UK could be affected by a free trade area of the type under consideration in this study. Unfortunately, it is not possible to measure directly the volume of such trade. The Bureau of Economic Analysis (BEA) data offer several proxies for this, and one is presented in table 2-11. BEA does report the trade of UK-owned affiliates with their foreign parent groups in the UK. This trade amounted to $3.36 billion of U.S. exports (1.3 percent of affiliate sales) and $9.25 billion of U.S. imports (3.6 percent of affiliate sales) in 1997. This

[17] "U.S. imports shipped by affiliates" in table 2-8 are not identical to "Sales to the United States" in table 2-7, possibly because some sales of services are not counted as merchandise trade.

Table 2-9
U.S. direct investment abroad in the United Kingdom; destination of sales, by industries; majority-owned foreign affiliates, 1997

Industry	Total sales	Sales to the United States	Percent of total	Local sales in the United Kingdom	Percent of total	Sales to third countries	Percent of total
			Billion dollars				
All industries	320.38	16.57	5.2	221.23	69.1	82.58	25.8
Petroleum	58.13	3.96	6.8	43.76	75.3	10.42	17.9
Manufacturing	126.93	7.21	5.7	74.64	58.8	45.07	35.5
Food and kindred products	12.78	0.11	0.9	11.12	87.0	1.55	12.1
Chemicals and allied products	22.73	0.73	3.2	12.90	56.8	9.10	40.0
Primary and fabricated metals	4.76	0.17	3.6	2.82	59.2	1.77	37.2
Industrial machinery and equipment	30.55	3.23	10.6	11.24	36.8	16.08	52.6
Electronic and other electrical equipment	10.69	0.76	7.1	6.96	65.1	2.98	27.9
Transportation equipment	24.70	1.32	5.3	16.16	65.4	7.22	29.2
Other manufacturing	20.73	0.90	4.3	13.44	64.8	6.39	30.8
Wholesale trade	40.45	0.69	1.7	30.94	76.5	8.82	21.8
Finance, insurance, real estate	38.73	3.68	9.5	25.44	65.7	9.60	24.8
Services	29.16	0.77	2.6	20.55	70.5	7.84	26.9
Other industries[1]	26.98	0.25	0.9	25.90	96.0	0.83	3.1

[1] Includes agriculture, forestry and fishing; mining, construction; transportation; communication; electric, gas, and sanitary services; and retail trade.

Note.—Data for majority-owned foreign affliates.

Note.—Totals for majority-owned foreign affiliates, totals for nonbank affiliates of nonbank parents used in tables 2-8 and 2-9.

Source: Bureau of Economic Analysis, U.S. Department of Commerce, *U.S. Direct Investment Abroad*; *Operation of U.S. Parent Companies and their Foreign Affiliates, Preliminary 1997 Estimates*, and USITC staff calculations.

Table 2-10
U.S. direct investment abroad; U.S. exports shipped to, and U.S. imports shipped by, majority-owned foreign affiliates, 1997

Industry	U.S. exports shipped to affiliates	Sales	U.S. imports shipped by affiliates	Sales
	Billion U.S. dollars	*Percent*	*Billion U.S. dollars*	*Percent*
All industries	16.48	5.1	8.30	2.6
Petroleum	0.08	0.1	1.33	2.3
Manufacturing	8.21	6.5	6.30	5.0
Food and kindred products	0.09	0.7	0.11	0.9
Chemicals and allied products	1.38	6.1	0.58	2.6
Primary and fabricated metals	0.25	5.3	0.11	2.3
Industrial machinery and equipment	1.86	6.1	2.87	9.4
Electronic and other electrical equipment	1.97	18.4	0.60	5.6
Transportation equipment	1.18	4.8	1.32	5.3
Other manufacturing	1.47	7.1	0.70	3.4
Wholesale trade	7.73	19.1	0.63	1.67
Finance, insurance, real estate	([1])	0	0	0
Services	0.17	0.6	0.03	0.1
Other industries[2]	0.29	1.1	0.02	0.1

[1] Less than $500,000.

[2] Includes agriculture, forestry and fishing; mining, construction; transportation; communication; electric, gas, and sanitary services; and retail trade.

Note.—Data for majority-owned foreign affiliates. Totals for majority-owned foreign affiliates differ somewhat from, and are slightly less than, comparable totals for nonbank affiliates of nonbank parents used in tables 2-8 and 2-9.

Source: Bureau of Economic Analysis, U.S. Department of Commerce, *Foreign Direct Investment in the United States: Preliminary Results from the 1997 Benchwork Survey.*

figure may either understate trade of UK-owned affiliates with the UK, because some trade takes place with nonaffiliated buyers and sellers in Britain, or overstate it, because some trade with the UK-owned parent group may take place with affiliates in third countries. Based on the available data, trade links of UK affiliates with their foreign parents are relatively stronger for computers and electronic products; chemicals; and motor vehicles, motor vehicle parts and supplies (e.g., British auto dealerships in the United States).

European Union Trade Relationships

As noted in Chapter 1, the EU is a customs union, with a common external tariff (CET) based on an arithmetic average of the previous national duties of individual member states before they joined the Union, and is subject collectively to General Agreement on Tariffs and Trade (GATT) and WTO commitments. The European Commission negotiates on behalf of the 15 EU member states in international trade fora, such as the WTO, and with third countries. Beyond the CET, the EU has concluded a variety of trade agreements with different groups of countries. Most nations in the world (with few exceptions, notably the United States and Japan) are included in some type of preferential arrangement with the EU.

Apart from GATT, three mechanisms have governed EU trade with nonmember European countries: the pre-1994 European Union-European Free Trade Area (EU-EFTA) relationship, the current European

Table 2-11
UK-owned foreign direct investment in the United States; U.S. exports shipped to the foreign parent group, and U.S. imports shipped by the foreign parent group, 1997

Industry	Total sales	U.S. exports shipped to the foreign parent group		U.S. imports shipped from the foreign parent group	
		Value	*Percent of total*	*Value*	*Percent of total*
	Billion dollars	*Billion dollars*		*Billion dollars*	
All industries	258.85	3.36	1.3	9.25	3.6
Manufacturing	124.23	2.94	2.4	7.20	5.8
Food	12.32	.04	.3	(1)	(1)
Beverages and tobacco	7.15	(1)	(1)	.21	3.0
Textiles, apparel, and leather products	2.02	.04	2.1	.03	1.7
Wood products	(1)	.01	(1)	.00	(1)
Paper	3.01	(1)	0	(1)	(1)
Printing and related support activities	.79	.01	1.6	.01	1.0
Petroleum and coal products	(1)	(1)	(1)	(1)	(1)
Chemicals	33.14	1.18	3.6	4.18	12.6
Plastics and rubber products	2.63	.01	.3	.02	.7
Nonmetallic mineral products	6.99	(1)	(1)	.10	1.4
Primary and fabricated metals	7.26	.07	.9	.48	6.6
Machinery	12.33	.21	1.7	.18	1.5
Computers and electronic products	6.71	.32	4.8	.84	12.6
Electrical equipment, appliances, components	.58	.01	2.1	.03	4.8
Transportation equipment	8.10	.13	1.6	.20	2.5
Furniture and related products	.03	(2)	.0	(2)	.0
Miscellaneous manufacturing	(1)	.13	(1)	.10	(1)
Wholesale trade	36.86	.24	.7	1.93	5.2
Motor vehicles, motor vehicle parts and supplies	.33	.01	3.9	.02	6.7
Professional, commercial equipment and supplies	1.21	.01	.6	.09	7.3
Electrical goods	1.03	.02	2.4	.06	5.8
Other durable goods	9.26	.09	1.0	.55	6.0
Petroleum and other non-durable goods	25.03	.10	.4	1.21	4.8
Other industries[3]	97.76	.18	.2	.12	.1

[1] Item suppressed for disclosure reasons.

[2] Less than $500,000.

[3] Includes retail trade; information industries (publishing, motion pictures and sound recording, broadcasting and telecommunications, information and data processing services), finance, insurance, real estate, rental and leasing, professional, scientific, and technical services, and other industries.

Note.—Industry categorization based on the North American Industries Classification System (NAICS) categories.

Source: Bureau of Economic Analysis, U.S. Department of Commerce, *Foreign Direct Investment in the United States: Preliminary Results from the 1997 Benchwork Survey*.

Table 2-12

Overview of the EU's Comprehensive Foreign Trade Agreements

Primary Trade Agreement Type	Provisions	Partner (current agreement date)
Association Agreement	Reciprocal.	EFTA: Iceland, Lichtenstein, Norway, Switzerland (all 1973)
Association Agreement	Reciprocal.	EEA: Iceland, Lichtenstein, Norway (all 1994)
Customs Accord	Graduated elimination of tariffs on most industrial items; contains provisions for future free trade in agricultural areas.	Turkey (1996)
Cooperation Agreements	Nonreciprocal; are being gradually replaced by EU-Mediterranean Partnership Association Agreements.	Algeria (1976), Cyprus (1972), Egypt (1977), Lebanon (1977), Syria (1977)
EU-Mediterranean Partnership Association Agreements	Widely varying degrees of reciprocity; most offer substantial EU concessions and aid. Stated goal of industrial free trade area by 2010.	Israel (1995), Jordan (1997), Lebanon , Malta (1991), Morocco (1996), the Palestinian Authority (1997), Tunisia (1995), and Yugoslavia
Europe Agreements (Association Agreements)	Free trade phased in over ten-year period with special protocols on sensitive products.	Hungary (1991), Poland (1991), Czech Republic, Slovakia (1993), Romania (1993), Bulgaria, Slovenia (1996), Estonia (1995), Latvia (1995), Lithuania (1995)
Partnership and Cooperation Agreements	Widely varying degrees of reciprocity; most offer substantial EU concessions and aid.	Russia (1994), Moldova (1994), Kazakhstan (1995), Georgia, Armenia, the Kyrgyz Republic (1996), Turkmenistan (1998), Ukraine (1994), Uzbekistan (1996)
Framework Agreement for Trade and Cooperation	Limited reciprocity.	Korea (1996)
Latin American Association Agreement	Wide agreement, envisioning eventual reciprocity.	Mexico (1997)
Interregional Framework Cooperation Agreements (Latin America)	Varying degrees of reciprocity; most offer substantial EU concessions and aid.	Mercosur: Argentina, Brazil, Uruguay (all 1995) Chile (1996)

Table 2-12—*Continue*d
Overview of the EU's Comprehensive Foreign Trade Agreements

Primary Trade Agreement Type	Provisions	Partner (current agreement date)
Cooperation Agreements (Andean Pact)	Varying degrees of reciprocity; most offer substantial EU concessions and aid.	Andean Pact: Bolivia, Colombia, Equador, Peru, Venezuela (all 1993)
Framework Cooperation Agreement	Varying degrees of reciprocity; most offer substantial EU concessions and aid.	Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama (all 1993)
Cotonou Agreement	Twenty-year agreement, replacing Fourth Lome Convention. Encompasses politics, trade, and development. The EU offers development aid and preferential access to most nonagricultural goods.	Angola, Antigua and Barbuda, Bahamas, Barbados, Belize, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo-Brazzaville, Democratic Republic of Congo, Djibouti, Dominica, Dominican Republic, Equatorial Guinea, Eritrea, Ethipia, Fiji, Gabon, Gambia, Ghana, Grenada, Guinea, Guinea Bissau, Guyana, Haiti, Ivory Coast, Jamaica, Kenya, Kiribati, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Papau New Guinea, Rwanda, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Solomon Islands, Somalia, South Africa, Sudan, Suriname, Swaziland, Tanzania, Togo, Tonga, Trinidad and Tobago, Tuvalu, Uganda, Western Samoa, Vanuatu, Zambia, Zimbabwe (2000)
Cooperation Agreement	Nonreciprocal agreement, including aid provisions. Textiles are covered in separate agreements.	Cambodia (1997), Laos, Macau (1992), Mongolia (1992), Nepal (1995), Pakistan (1985), South Africa (1994), Sri Lanka (1994), Vietnam (1995), Yemen (1998)
Cooperation Agreement	Free trade and customs union.	San Marino (1991)

Table 2-12—*Continued*
Overview of the EU's Comprehensive Foreign Trade Agreements

Primary Trade Agreement Type	Provisions	Partner (current agreement date)
Cooperation Agreement (ASEAN)	Widely varying degrees of reciprocity; most offer substantial EU concessions and aid.	ASEAN: Singapore, Vietnam, Thailand (all 1996)
Only limited (noncomprehensive) trade agreements		Australia, Canada, Hong-Kong, India, Japan, New Zealand, Philippines, UAE, USA
No Commercial Agreements		Afghanistan, Cuba, Iran, Iraq, Kuwait, Monaco, Myanmar, Marshall Islands, Oman, Qatar, Tadjikistan

Source: USITC Staff Compilation.

Economic Area (EEA), and, since 1990, EU association agreements with Central and Eastern European countries (sometimes called Europe Agreements). These accords are discussed next, along with EU-Swiss relations and two-tier EU membership. Although the different types of EU legal relationships with nonmember European countries do allow varying degrees of free trade and market access with the EU, as well as third countries' freedom to negotiate their own external trade arrangements, discussion of these agreements is not meant to suggest a realistic political alternative to UK membership in the EU.

The European Free Trade Association

The European Free Trade Association (EFTA) was formed by the 1959 Stockholm Convention as a result of a previous, wider attempt by the Organization for European Economic Cooperation to organize a free-trade area. It was conceived as an alternative to European Economic Community (EEC) membership. Formed with seven members (Austria, Denmark, Norway, Portugal, Sweden, Switzerland, and the United Kingdom), at its height it had more members than the EEC. In 1973, the UK and Denmark left the Association to join the EEC; Portugal did the same in 1985. Finland became an associate EFTA member in 1961 and a full member in 1986. Iceland became a full member in 1970. Lichtenstein, through its customs union with Switzerland, was for practical purposes an EFTA member, and formally joined EFTA in 1991. In 1995, Austria, Sweden, and Finland broke away from EFTA to join the EU, the descendent of the EEC. Current EFTA members include Iceland, Lichtenstein, Norway, and Switzerland.

The original purpose of EFTA was the creation of a free trade area, along-side the EEC. The Agreement did not address agricultural trade, but did seek to liberalize and reduce tariffs in industrial sectors. By 1967, most industrial import tariffs had been eliminated within EFTA, and a legal framework supported members' bilateral agreements on agriculture. Free trade between EFTA and the EEC was established only in 1977 through a series of bilateral trade agreements. By the end of 1999, 67 percent of EFTA's foreign trade was with the EU, and 11 percent was with NAFTA countries. Overall, however, EFTA's total trade with non-EU member states is expanding faster than its trade with the EU.[18]

Advocates of a UK-North American trade arrangement have called for the UK to revert to its previous EFTA membership. Some of these advocates have pointed out that because EFTA is not a customs union, UK membership in EFTA would allow the UK to enjoy free trade with the EU, yet at the same time engage in bilateral trade agreements. However, this result would not be completely achieved through EFTA membership. EFTA typically negotiates industrial issues collectively, while agricultural and fishery issues are treated under bilateral agreements between by EFTA member states and third countries.

[18] "EFTA Facts and Figures," EFTA National Statistical Offices, Geneva: December, 1999.

European Economic Area

EFTA pressure for closer ties with the EU resulted in the 1994 creation of the European Economic Area (EEA), which extended to participating EFTA members the EC's "four freedoms" (freedom of movement for goods, services, workers and financial services), as well as scientific cooperation programs.[19] Current EEA members are Iceland, Lichtenstein, and Norway. EEA trade and investment is governed by its competition regime, based on existing EC/EU competition rules. Competition policy is reviewed by the EFTA Surveillance Authority parallel to the European Court of Justice and European Commission, which rules on cartels, dominant firms and state aid. All merger cases in the EEA are decided by the EU's European Commission. The EEA requires EFTA countries to contribute funds to assist underdeveloped EU regions and EFTA members to assume EU single market measures as they are adopted. The EEA also ensures that EFTA members' views are considered by the EU in the formulation of single-market measures, and gives the EU some control over enforcing EFTA compliance.

Free movement of goods required EFTA members that are EEA signatories to remove NTBs (and consequently adopt EU technical standards and safety regulation), to reduce tariffs, and to simplify trading procedures. In reality, EFTA members often have higher safety standards than the EU; the EEA ensures that EFTA states cannot use these measures to restrain EU exports. EFTA countries also are prohibited from imposing discriminatory taxes and must have an open public procurement system. Free movement of services obligations led the EEA signatories to adopt the EU's Second Banking Directive and to liberalize sectors such as telecommunications and transportation. The free movement of workers enables EFTA nationals from EEA signatories to work throughout the EU and EFTA countries participating in the EEA, and allows EU workers in EEA signatory countries.

Specific EU-EFTA trade problems have included fishing, the environment, agriculture, and budget contributions to EU regional development funds. However, EFTA is a free trade arrangement, not a customs union like the EU, and has stayed out of the EU's most contentious policy debates, such as those over the Common Agricultural Policy (CAP) and European Monetary Union (EMU). The EEA will likely have to be renegotiated if and when EU enlargement occurs. The EEA agreement remains dynamic through monthly meetings of the EEA Joint Committee of EEA and EU representatives. The Joint Committee makes adjustments in EEA regulations and rules to align the EEA with relevant EU legislation. Currently, under Protocol 31 of the EEA, signatories take part in 26 EU programs, including scientific research and development, energy policy, education, training and employment, tourism, and social policy. Some political and academic figures in Britain, contacted by the ITC in this investigation, who advocate a UK-North Atlantic trading arrangement point to EEA membership as an alternative to current EU membership. They contend that British goods would thus enjoy preferential access to EU markets, while ensuring the UK's ability to conduct bilateral trade agreements and giving it freedom from EU regulations. However, given the close cooperation between EEA participants and the EU, as well as the increasingly unified nature of EFTA foreign trade policy, EEA membership implies a close relationship with the EU and a significant adoption of EU regulatory standards and goals. It might be technically possible for an EEA member to negotiate bilaterally with the United States, Mexico, and Canada. However, this would not be in the spirit of recent, unified EEA actions in trade and regulation.

[19] The EEA creates a free trade area in many industrial sectors, encompassing all EU members, plus those EFTA members that have accepted the provisions of the EEA.

Switzerland

Perhaps the most distinctive relationship between the EU and a nonmember European state is the system of bilateral agreements between the EU and Switzerland, finalized in December 1998. Although Switzerland has been a member of EFTA since 1959, Swiss voters in 1994 chose not to support a referendum on EEA membership. Lichtenstein, which has a customs union with Switzerland, also did not join the EEA. Instead, Switzerland embarked on an ambitious negotiation with the EU, which resulted in seven sector-specific agreements, eliminating barriers to the free movement of people, civil aviation, overland transport, agricultural goods, technical barriers to trade, research, and public procurement.

Freedom of movement of people will be achieved within 12 years of one bilateral agreement, but the process can be halted by Switzerland after seven years if it is not seen to be successful. The agreement on civil aviation allows Swiss airlines access to the deregulated EU civil aviation market on a reciprocal basis. The agreement on overland transport provides the basis for further negotiations and mandates a definite agreement no later than 2008. The agreement on agricultural produce reduces and eliminates NTBs, requires mutual recognition of technical requirements in some agricultural sectors, and harmonizes some quality standards.

This agreement does open some previously protected EU and Swiss markets, though it is not comprehensive. The agreement on elimination of technical barriers to trade mandates mutual recognition of tests, certificates, and other measures of standards for most industrial products. Duplicate testing in these cases was eliminated. The agreement on research enhances Swiss participation in the EU's Framework Research Program, its premier research and development vehicle. The agreement on public procurement is based on WTO rules in this area. Minor adjustments were made in cases where the EU-Swiss arrangement exceeds WTO requirements in telecommunications, energy, railways, water, transportation, and local authorities.

Europe Agreements

Since 1992, the EU has concluded a series of bilateral agreements with Central and Eastern European countries. These agreements vary, but generally are similar in aiming to establish bilateral free trade in industrial products. Most also are asymmetrical, involving faster liberalization in the EU than in its East European trading partners, though in some cases the EU has imposed voluntary export restraint clauses on its East European partners. These so-called "Europe Agreements" contain provisions for the right of establishment, freedom to supply services, currency convertability, political dialogue, and limited free movement of labor. Europe Agreements have been concluded between the EU and Bulgaria (1995), the Czech Republic (1995), Estonia (1995), Hungary (1994), Latvia (1998), Lithuania (1998), Poland (1994), Romania (1995), Slovenia (1996), and Slovakia (1995).

The end objective of most Europe Agreements is accession to the EU. While the EU's political will to accept Central and Eastern European members is currently a matter of much debate, most Europe Agreements support the aim of accession, either explicitly or implicitly. This goal was first expressed at the Copenhagen European Council in June 1993, where the EU affirmed that countries with Europe Agreements could become members of the EU as soon as they were able to assume the obligations of membership by satisfying the economic and political conditions. Soon after, many Central and Eastern European countries applied for membership. The Essen European Council in December 1994 agreed to a comprehensive preaccession strategy for the associated countries, the main elements of which involve concluding a Europe Agreement, establishing political dialogue with the EU, and participating in the EU aid program Phare.[20]

Five Eastern European countries are currently scheduled for first tier accession (the Czech Republic, Estonia, Hungary, Poland, and Slovenia), and a number of other countries with Europe Agreements have been accepted as eventual candidates for membership by the EU, including Latvia, Lithuania, and Slovakia. The Europe Agreements, while a pattern for political and economic cooperation between developed and developing European countries and the EU, thus do not seem to be a viable model for a country wishing to maintain its independent status for purposes of negotiating international agreements outside Europe.

Outer Tier EU Membership

Traditionally, European integrationists have acknowledged competing agendas in widening the scope of European Union. Widening, or extending membership, most likely to Central and Eastern European countries, is seen as incompatible with deepening, or increasing the scope of European centralization, such as by instituting a single currency. Yet in the 1990s, the EU struggled to accommodate both widening and deepening agendas, instituting the Euro and moving ahead with plans to allow new member states (Hungary, Poland, the Czech Republic, Cyprus, Estonia, Malta, Slovenia). The UK, Sweden, Greece, and Denmark have so far not joined the European Single Currency, leading to a de facto two-tier EU at this time. Although the UK, Sweden, and Greece have expressed a readiness to adopt the Euro at the next available opportunity, it is possible that the next tranche of EU members would not accede immediately to all EU commitments, such as the CAP and single currency, leading to a Union of different commitments. In such a situation, various member states might conceivably renegotiate their relationship with the EU to include some provisions but not others, weakening the customs union. The Treaty of Rome, the EU's founding document, however, clearly prohibits all bilateral trade agreements by member states, mandating instead that the EU negotiate as a whole.

[20] Founded in 1989 to assist Poland and Hungary in their transition from Communism, Phare now provides EU funds (7.757 billion Euros in 1997) to many Eastern European countries (13 in 1997) to support a range of reform programs. Phare awards grants to support institutional reform, government decentralization, privatization, restructuring of state-owned enterprises, modernizing the banking and financial sectors, and legal and regulatory reform.

Summary

Any change in the UK's trading relationships of the type envisaged in the request letter from the Senate Finance Committee would require the formation of some policy to govern the UK's trade relationship with the rest of the EU. Such a policy could fall within a broad range of possibilities, from keeping current preferential trade relationships essentially unchanged to a complete severance of ties between the UK and the EU. This discussion illustrates some of the intermediate trade relationships that the EU maintains with other countries. Needless to say, since over half of the UK's imports and exports are with the EU, this trade relationship is important to the UK economy and any changes to it would have profound effects.

CHAPTER 3
Sectoral Trade

Introduction

This chapter provides a snapshot of trade and industry in the United States, Canada, Mexico, and the UK. It contains brief profiles of the major industry sectors in these countries and highlights significant competitive advantages, such as abundant natural resources, highly educated workforce, or low energy costs. This chapter also describes significant trade patterns and reported barriers to trade, both tariff and nontariff, between the North American countries and the UK on a sectoral basis.[1]

For purposes of this report, significant tariff barriers are those that meet or exceed the Uruguay Round peak tariff level of 15 percent ad valorem. Final Uruguay Round bound rates were used to determine tariff barriers between the UK and the United States and Canada. Final NAFTA rates were used for trade among the United States, Canada, and Mexico and the staged rates in the EU/Mexico Free Trade Agreement (FTA) were examined for these markets.[2] Because the EU/Mexico FTA will reduce all tariffs outside the agricultural sector to below 15 percent by 2001, only tariffs for agricultural products were reviewed. In some instances, tariffs below 15 percent were cited by industry representatives or government documents as barriers to trade. These tariffs are also included in the sectoral tables in appendix D.

Nontariff barriers, for purposes of this report, are impediments to trade identified by government or private sector organizations, and are not limited to those that are discriminatory. Information on these measures was gathered from interviews with U.S. industry representatives, fieldwork in the UK, TransAtlantic Business Dialogue documents, and U.S. and EU government documents. Specific nontariff barriers detailed by these sources are listed by sector in appendix D. A very brief summary of these measures is included in each of the sector writeups that follows.

A free trade arrangement between North American countries and the UK would affect a substantial amount of trade. In 1998, UK imports of goods and services from the North American countries were valued at more than $100 billion and North American imports from the UK at approximately $65 billion. Services and machinery and transportation equipment accounted for more than half of all imports. This chapter uses U.N. import data to represent trade flows among each of the four countries. Import data were used exclusively because trade flows as reported by the importing country rarely reconcile with those reported by the exporting country, and import data are generally regarded as more reliable.

In addition to the barriers discussed below that affect specific sectors, there are a number of barriers that apply to a broad range of products.[3] In the UK these barriers consist mainly of standards, testing, certification, and labeling issues as well as patent filing and packaging recycling regulations. Government procurement, inadequate patent protection, labeling, and taxes are the principal cross-sector barriers in Canada, with both Federal and Provincial Government regulations cited by trading partners. A wide variety of Mexican barriers also was identified. These included standards, testing, certification, and labeling; various customs procedures; lack of intellectual property protection; and government procurement restrictions. Standards, customs procedures, and government procurement at both the Federal and sub-Federal levels, intellectual property laws, and Foreign Sales Corporations were named as trade barriers with the United States.

[1] The trade barriers of the UK, a member of EU, are assumed to be the same as EU barriers.

[2] The 1999 United Nations Conference on Trade and Development database was used for Mexican agricultural tariffs rather than final Uruguay Round bound rates, because of comparability problems with the tariff classifications in the EU/Mexico FTA.

[3] These reported barriers are described in greater detail, with sources of information, in appendix D, tables D-1 through D-4.

Agricultural Products[4]

Industry and Trade

The United States is a major global producer and trader of agricultural products. Production in the U.S. agriculture sector totaled approximately $373 billion in 1998, a 2-percent average annual increase over 1994. The agricultural sector accounted for approximately 4 percent of U.S. GDP in 1998. Major items include meat animals and their products (mainly beef, chicken, and pork), fish products, feed grains and oilseeds (mainly corn and soybeans), horticultural crops (mainly fruits and vegetables), and manufactured food items. The agricultural sector employed approximately 3.6 million workers in 1998, representing about 3 percent of the total workforce. Competitive strengths of the U.S. agricultural sector include abundant natural resources (mainly land and water), relatively low input costs, a variety of climates, the application of advanced technologies, and highly skilled and educated farmers who employ sophisticated resource management techniques. Foreign direct investment stocks in the U.S. food manufacturing sector amounted to about $18 billion in 1998, representing 2 percent of the total for all industries.[5] Principal source countries included the UK, Canada, France, and Switzerland. U.S. direct investment stocks in foreign food manufacturing sectors totaled $34 billion in 1998, representing 3 percent of the total for all industries.[6] Primary export markets included Canada, Mexico, the UK, and France.

Canada is a major world agricultural producer and exporter. Canadian agricultural production reached approximately $36 billion in 1998, an increase of about 7 percent over the level in 1994. Agricultural production represented 6 percent of Canadian GDP in 1998. Primary products include food grains and oilseeds (mainly wheat and canola), potatoes (including frozen french fries), fishery products (mainly groundfish and shellfish), and livestock and their products (mainly beef and dairy products). Agricultural sector employment was 758,000 in 1998; this represented about 5 percent of the total workforce that year. The Canadian agriculture sector enjoys competitive strengths similar to the U.S. sector, except for climate. The foreign direct investment position in the Canadian agricultural sector is concentrated in grain milling, bakery products, and beverages.[7]

Mexico is becoming an increasingly important agricultural producer and supplier in the North American market. Agricultural sector production in Mexico amounted to approximately $40 billion in 1998. Although this represented a decrease in total value of 43 percent from the 1994 level, the quantity of imports actually increased throughout the period.[8] The agricultural sector provided approximately 10 percent of Mexican GDP in 1998. Principal products include livestock and their products (mainly cattle and beef), grains (mainly corn), horticultural products (mainly fresh fruit and vegetables), fishery products (mainly tuna and shrimp), and manufactured food products. Employment in the sector reached 1 million in 1998, accounting for about 3 percent of the total Mexican workforce. Competitive strengths of the Mexican agriculture sector include relatively low input costs (mainly land and labor) and a climate that is complementary to those of its major export markets (traditionally the United States and Canada). The foreign direct investment position in the Mexican agriculture sector amounted to about $4 billion in 1996.[9] Such investment is concentrated in further-processed products.[10] Mexican direct investment in foreign agricultural sectors is relatively minor.

The UK is an important EU agricultural producer. Agricultural production in the UK increased by 11 percent to $58 billion during 1994-98 and provided

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[4] This sector encompasses goods covered by chapters 1 through 24 of the Harmonized Tariff Schedule, which include most basic agricultural and fisheries products as well as processed food products.

[5] U.S. Department of Commerce, Bureau of Economic Analysis , *Foreign Direct Investment Position in the U.S. on a Historical Cost Basis, 1998*, found at *http://www.bea.doc.gov/bea/di1fdipos_98.htm*, retrieved Apr. 27, 2000.

[6] U.S. Department of Commerce, Bureau of Economic Analysis, *U.S. Direct Investment Position Abroad on a Historical Cost Basis, 1998*, found at *http://www.bea.doc.gov/bea/di1diapos_98.htm*, retrieved Apr. 27, 2000.

[7] Christine Bolling, Steve Neff, and Charles Handy, *U.S. Foreign Direct Investment in the Western Hemisphere Processed Food Industry*, U.S. Department of Agriculture, Economic Research Service, Agricultural Economic Report No. 760, Washington, D.C., March 1998, p. 12.

[8] The decline in dollar terms resulted from exchange rate movements during the period. In 1994, $1 was equal to 3.5 pesos; in 1998, $1 was equal to 9 pesos.

[9] Organization for Economic Co-operation and Development (OECD), *International Direct Investment Statistics Yearbook 1998*.

[10] Bolling *et. al.*, p. 12.

about 4 percent of the 1998 GDP. Primary products include livestock and their products (mainly dairy, beef, poultry, and sheep), cereals (mainly wheat and barley), horticultural products (mainly fruit and vegetables), and processed food items. The UK agriculture sector employed about 1 million workers in 1998, or 4 percent of the national total. The UK agriculture sector enjoys competitive strengths in terms of technology, marketing, and an emphasis on value-added products. Foreign direct investment in the UK agriculture sector exceeded $8 billion in 1996, while UK direct investment in foreign agricultural markets was approximately $35 billion.[11]

North America is not a principal destination for UK agricultural products. Total U.S. imports of sector products were $50 billion in 1998, less than 3 percent of which were from the UK (table 3-1). U.S. imports from the UK grew steadily throughout 1994-98, but at a slower rate than total imports from other sources. More than half of all U.S. imports from the UK in this sector were beverages and spirits. Canadian imports of UK agricultural products fluctuated within a range of $196 million to $222 million during 1994-98, although total sector imports increased significantly. The largest import categories were beverages and spirits, chocolate, and tea. Mexican agricultural product imports from the UK represented less than 1 percent of its total imports in this sector in 1998 with major categories consisting of beverages and spirits and powdered milk. Imports from the UK declined by 46 percent in 1995 to $31 million, principally due to the peso crisis, and although they have recovered to pre-1995 levels, they have lost import share to other sources. UK imports of agricultural products totaled $31 billion in 1998, with just 7 percent coming from North America. UK imports from the United States were primarily beverages and spirits, edible fruits and nuts, oil seeds, and prepared animal feed. Fish, grains, oil seeds, and related products were the largest UK import categories from Canada and fruit, sugar, and spirits were the principal UK imports from Mexico.

Barriers to Trade

The EU has a broad range of tariffs, regulations, and programs that have been identified as impediments to trade in agricultural products.[12] Many EU agricultural imports face tariffs in excess of 15 percent. Most of these products fall into categories such as meat and meat products, fish, tobacco, sugar and sweeteners, and dairy products. Prepared foods, juices, and wine also have relatively high tariffs. Nontariff barriers are mainly in the form of sanitary and phytosanitary regulations regarding labeling and toxin levels; price supports; restrictions on processes and ingredients; and certification. Labeling requirements and long, unpredictable approval processes have been cited as EU barriers to imports of genetically modified corn, soybeans, and other agricultural products. Animal products can only be exported from EU-approved facilities, and the process of obtaining approval is stated to be unnecessarily long and uncertain. Wine-making and poultry-processing regulations have also been named as impediments to exporting to the EU. Many EU agricultural products, including wheat, meat, dairy, fruit, and manufactured foods, are alleged to benefit from price supports and discriminatory import policies allegedly favor certain non-EU banana producers.

Canada maintains trade barriers on a wide range of agricultural products.[13] Canadian nontariff import barriers affect the tobacco, alcoholic beverage, fishing, meat, poultry, and dairy industries and tariff rate quotas impede trade in grain products, beef, and veal. Imports of cigarettes are prohibited and support programs and import controls favor the domestic poultry and dairy industries. Commercial fishing licenses are restricted to Canadian-controlled firms and importing firms may be subject to repeated sanitary inspections. Provincial regulations such as inspection and packaging rules for agricultural products, bulk shipment restrictions, and restrictions on the distribution of alcoholic beverages were cited as significant impediments to trade. High tariffs restrict a few categories of imports into Canada. Alcoholic beverages and vegetables, face the highest Canadian tariffs.

Tariffs present the most significant barriers to agricultural trade with Mexico.[14] Live animals and animal products are generally subject to tariffs of 18 percent to 46 percent although eggs, poultry, fowl, and animal fat face tariffs ranging up to 260 percent. Most fruits and vegetables are subject to tariffs of 18 percent to 23 percent, with the exceptions of kidney beans, duti-

[11] Organization for Economic Cooperation and Development, *International Direct Investment Statistics Yearbook 1998*.

[12] These barriers are described in greater detail in appendix D, tables D-5 and D-6. Sources of nontariff barrier information are identified in table D-5.

[13] These barriers are described in greater detail in appendix D, tables D-7 and D-8. Sources of nontariff barrier information are identified in table D-7.

[14] These barriers are listed in appendix D, table D-10. The rates in this table are 1999 tariff rates that were not reduced by the EU/Mexico Free Trade Agreement or have a staging period of 7 years or more.

Table 3-1
Agricultural products: Trade for Canada, Mexico, the UK, and the United States, 1994-98
(Million dollars)

Importer	Exporter	1994	1995	1996	1997	1998
Canada	Mexico	163	216	237	258	267
	UK	203	196	207	222	219
	United States	5,422	5,684	5,991	6,666	6,932
	Rest of world	3,496	3,662	3,908	4,157	4,280
	World	9,284	9,758	10,343	11,303	11,698
Mexico	Canada	395	320	433	416	546
	UK	56	31	40	82	54
	United States	4,910	3,602	5,374	5,321	5,864
	Rest of world	1,531	901	1,324	1,414	1,294
	World	6,892	4,854	7,171	7,233	7,758
UK	Canada	315	385	403	373	425
	Mexico	31	47	40	45	53
	United States	1,219	1,500	1,551	1,653	1,660
	Rest of world	22,651	25,686	27,920	28,268	28,529
	World	24,216	27,618	29,914	30,339	30,667
United States	Canada	6,966	7,264	8,557	9,431	9,925
	Mexico	3,560	4,640	4,627	5,064	5,638
	UK	983	1,004	1,126	1,181	1,257
	Rest of world	25,364	26,591	28,915	32,209	32,698
	World	36,873	39,499	43,225	47,885	49,518

Source: *U.N. Trade Statistics*, United Nations Statistics Division, found at *http://untrade.fas.usda.gov/untrade/,* retrieved June 7, 2000.

able at 128 percent, and cereal grains and cereal products, at rates as high as 198 percent. Other agricultural products facing high tariffs include prepared meat and fish, beverages, and tobacco; sugars and syrups; chocolate products; and coffee and coffee extract. Mexican nontariff barriers are mainly in the form of sanitary and phytosanitary restrictions, price controls, and nontransparent customs procedures. There are also concerns regarding Mexico's administration of its tariff rate quota obligations and application of antidumping measures.[15]

U.S. impediments to imports fall into several categories.[16] Sanitary and phytosanitary regulations governing fruits and vegetables, live animals, meat, and dairy products are viewed by EU exporters as being stricter than is necessary. U.S. environmental standards affecting fish imports and the prohibition or limitations on the use of foreign vessels in U.S. waters are viewed as excessive. Other policies cited as barriers to trade were the administration of tariff rate quotas and the lack of protection of certain names of alcoholic beverages. According to the EU, U.S. nontariff barriers include export promotion and financing programs because they enhance the competitiveness of a wide range of U.S. agricultural products in non-U.S. markets. U.S. Uruguay Round final bound tariffs higher than 15 percent apply to products in a number of categories. Tariffs on dairy products range from 16 percent to 25 percent and those on tobacco range from 15 percent to 48.6 percent. Certain fish products, such as canned sardines and tuna in oil, are subject to duties of up to 35 percent, while various fruit, vegetable, and nut products face tariffs as high as 29.8 percent. Other products with high tariffs are citrus juice, which is subject to tariffs of 15.7 percent to 21.9 percent, and soybean oil products, with tariffs of 18 percent to 19.1 percent. Tariff-rate quotas allow

[15] These barriers are described in greater detail in appendix D, table D-9. Sources of nontariff barrier information are identified in the table.

[16] These barriers are described in greater detail in appendix D, tables D-11 and D-12. Sources of nontariff barrier information are identified in table D-11.

a lower rate of duty to be applied to specified (trigger) quantities of tobacco products. As these quotas generally fill, they result in the imposition of high tariffs on over-trigger-level imports.

Energy and fuels[17]

Industry and Trade

The United States, the world's largest consumer of energy and fuels, also is a major producer, accounting for 19 percent of the world's production of energy and fuels in 1998. Although the value of U.S. production decreased by about 4 percent annually from $180 billion to $150 billion during 1994-98 because of decreases in the per barrel price of crude petroleum, the quantity produced actually increased by 2 percent. Energy and fuels accounted for about 2 percent of U.S. GDP in 1998. Major items include crude petroleum, refined petroleum products (fuel oils and motor fuels), and natural gas. The sector employed approximately 1.4 million workers in 1998. Competitive strengths of the U.S. energy and fuels sector include abundant crude petroleum and natural gas reserves, world-scale refining capacity, a well-maintained infrastructure of pipelines, ports, and advanced technologies for drilling, production, and refining. Foreign direct investment in the U.S. energy and fuels sector amounted to about $35 billion in 1998. Although the U.S. energy and fuels sector is made up of more than 19,000 companies involved in the exploration, production, refining, and marketing of energy products, a small number of large multinational companies account for about 75 percent to 80 percent of total U.S. production of energy and fuels.

Canada accounted for 5 percent of the world's energy and fuels production in 1998. Decreases in the per barrel price of crude petroleum reduced the value of Canadian production from $42 billion to $40 billion during 1994-98, while the quantity it produced increased by 4 percent. Energy and fuels accounted for about 7 percent of Canadian GDP in 1998. Major items include crude petroleum, refined petroleum products (fuel oils and motor fuels), and natural gas. This sector employed approximately 800,000 workers in 1998. Competitive strengths of the Canadian energy and fuels sector include large crude petroleum and natural gas reserves, world-scale refining capacity, well-maintained infrastructure of pipelines that are interconnected with U.S. pipelines, and advanced technologies for drilling, production, and refining. Foreign direct investment in the Canadian energy and fuels sector amounted to about $8 billion in 1998.

Mexico accounted for 5 percent of the world's production of energy and fuels in 1998. The value of Mexican production of energy and fuels remained relatively stable at $39 billion in both 1994 and 1998 despite a decrease in the per barrel price of crude petroleum during the period. The quantity of Mexican production increased by 8 percent to 2.8 billion barrels during 1994-98. Energy and fuels accounted for about 9 percent of Mexican GDP in 1998. Major items include crude petroleum, refined petroleum products (fuel oils and motor fuels), and natural gas. The sector employed approximately 1 million workers in 1998. The Mexican energy and fuels sector's competitive advantage lies in abundant reserves of crude petroleum. Foreign direct investment in the Mexican energy and fuels sector amounted to about $130 million in 1998. Under the provisions of the Mexican Constitution, all aspects of Mexico's petroleum, natural gas, and basic petrochemicals industries, including exploration, drilling, production, refining, distribution, pipeline transmission, trade, and oilfield services, are under the sole purview of Pemex.

The UK accounted for 4 percent of the world's production of energy and fuels in 1998. The value of UK production of energy and fuels decreased from $29 billion in 1994 to $27 billion in 1998 because of decreases in the per barrel price of crude petroleum. The quantity of UK production increased slightly from 3.6 billion barrels in 1994 to 3.9 billion barrels in 1998, or by 8 percent. Energy and fuels accounted for about 2 percent of UK GDP in 1998. Major items include crude petroleum and refined petroleum products (fuel oils and motor fuels), as well as some natural gas. The sector employed approximately 750,000 workers in 1998. Abundant reserves of crude petroleum in the North Sea provide a competitive advantage for the UK in this sector. On the other hand, higher transportation costs mitigate this advantage. Energy and fuels (crude petroleum and refined petroleum products) from the UK must be shipped via tanker, whereas the United States and Canada share an intricate system of pipelines and Mexico has a pipeline entering the U.S. system in Texas. As a result, transportation costs between North American countries for energy and fuels are lower than those between the UK and North America. Foreign direct investment in the UK's energy and fuels sector amounted to about $14 billion in 1998.

Imported energy and fuels totaled $72 billion for the North American countries and $8 billion for the UK during 1998 (table 3-2). More than one-third of

[17] This sector encompasses goods covered by chapter 27 of the Harmonized Tariff Schedule.

Table 3-2
Energy and fuels: Trade for Canada, Mexico, the UK, and the United States, 1994-98
(Million dollars)

Importer	Exporter	1994	1995	1996	1997	1998
Canada	Mexico	111	81	142	193	139
	UK	1,023	1,084	1,280	1,248	573
	United States	1,200	1,344	1,858	2,379	2,570
	Rest of world	2,828	3,449	4,176	4,981	3,496
	World	5,162	5,958	7,456	8,801	6,778
Mexico	Canada	23	26	20	26	16
	UK	9	6	3	46	107
	United States	1,133	1,273	1,506	2,284	2,062
	Rest of world	303	201	243	587	493
	World	1,468	1,506	1,772	2,943	2,678
UK	Canada	49	93	95	107	104
	Mexico	90	88	94	97	72
	United States	277	357	448	356	437
	Rest of world	9,034	8,779	10,341	10,151	7,099
	World	9,450	9,317	10,978	10,711	7,712
United States	Canada	13,196	14,276	17,371	18,489	15,164
	Mexico	5,297	6,061	6,993	8,747	5,546
	UK	3,485	2,930	2,973	2,254	1,657
	Rest of world	38,268	39,890	49,856	53,192	39,900
	World	60,246	63,157	77,193	82,682	62,267

Source: *U.N. Trade Statistics*, United Nations Statistics Division, found at *http://untrade.fas.usda.gov/untrade/,* retrieved June 7, 2000.

1998 sector imports of the United States, Canada, and Mexico came from within these countries and 3 percent came from the UK that same year. UK imports of energy and fuels from North America were less than 7 percent, by value, of its total sector imports in 1998.

Barriers to Trade

The energy sectors in the United States and the UK have few tariff and nontariff trade barriers.[18] However, Canada did not bind its tariffs on gas, oil, and related products in the Uruguay Round, and its tariffs are subject to change at any time. Currently, Canadian applied rates for this sector range from free to 12.5 percent ad valorem. Other Canadian barriers cited in this sector are excise taxes on gasoline and a prohibition on foreign ownership of uranium mines. Access to the Mexican market is restricted because oil exploration, production, refining, and gasoline retailing and trade in Mexico are reserved for Pemex, a state-owned monopoly. Further, prices of basic petrochemicals and petroleum-based fuels are set by the Ministry of Finance.

Chemicals, plastics, and rubber products[19]

Industry and Trade

The United States is the largest global producer and a net exporter of chemicals, plastics, and synthetic rubber. In 1998, the value of all shipments in this category was approximately $300 billion, or nearly 4 percent of U.S. GDP, and the sector employed

[18] These barriers are described in greater detail in appendix D, tables D-13 through D-16. Sources on nontariff barrier information are given in tables D-13 and D-15.

[19] This sector encompasses goods covered by chapters 28, 29, and 31 through 40 of the Harmonized Tariff Schedule.

approximately 1 million workers.[20] During 1994-98, the value of domestic shipments in this sector grew at an average annual rate of about 5 percent. Major products in this sector include organic chemicals, fabricated plastic and rubber materials, plastic resins, tires and inner tubes, and synthetic rubbers. In several segments of this sector (e.g., dyes, pesticides, plastics, rubbers, and pigments) multinational companies are prominent U.S. producers. Foreign direct investment in the U.S. chemicals and allied products industries in 1998 was about $90 billion.[21] The chemical industries of the United States, Canada, Mexico, and the UK are similar in that most of their output is based on byproducts of petroleum and natural gas. There are several joint venture affiliations between U.S. and Canadian companies and a growing U.S. presence in the Mexican plastics industry.

In 1998, the value of all Canadian shipments of chemicals, plastics, and rubber products was estimated at $24 billion, 4 percent of GDP, and the sector employed approximately 100,000 workers.[22] The major segments in the Canadian chemical sector, in order of importance, are plastic products, plastic and synthetic resins, organic chemicals, and inorganic chemicals. The Canadian plastics industry is geared primarily to polyethylene manufacture driven by plentiful economic sources of natural gas feedstock. The U.S.-Canada Free Trade Agreement in 1989 and NAFTA in 1994 helped to strengthen Canadian trade with the United States and Mexico, particularly Canada's plastics trade with the United States. Foreign direct investment in the Canadian chemical sector is significant in certain industries, such as commodity organic chemicals and plastics. U.S. foreign direct investment in the Canadian chemicals and allied products sector was approximately $8 billion in 1998, 10 percent of total U.S. foreign direct investment in the sector.

Mexico's shipments of chemicals, plastics, and rubber in 1998 were approximately $15 billion, 4 percent of GDP, and the sector employed 70,000 workers. Although the Mexican economy was severely depressed throughout 1995 following the collapse of the peso, economic recovery commenced in 1996. Mexico produces a broad range of products, mainly organic and inorganic chemicals, plastics, and rubber products. Several U.S. plastics firms operate plants in Mexico to satisfy Mexican demand for plastic soda bottles and styrene products. The chemical sector in Mexico consists of 350 companies operating 400 plants, located mainly in the states of Veracruz, Mexico, Nuevo Leon, and Tamaulipas and in the Federal District.[23] U.S. investment in the chemicals and allied products industries was approximately $3.5 billion in 1998.

In 1998, total UK chemical shipments in all forms were approximately $37 billion, or 3 percent of GDP.[24] Output has increased by about 3 percent annually during the past decade. Chemical sector employment in the UK was about 175,000 workers in 1998.[25] The UK chemicals sector was the third largest in the EU behind Germany and France.[26] Major products include specialty organic chemicals, rubber, and plastics. U.S. investment in UK chemicals and allied products in 1998 was about $10 billion.

Trade in this sector between the North American countries and the UK is relatively small compared with these countries' trade with other partners. UK imports of chemicals, plastics, and rubber products from North American countries grew 33 percent during 1994-98 to $3.8 billion, but was only 12 percent of total UK imports of goods in the sector (table 3-3). Imports from the UK accounted for less than 3 percent of North American countries' imports in 1998, totaling only $5 billion. U.S. imports from the UK rose by nearly 40 percent during 1994-98 significantly outpacing the growth of Mexican and Canadian imports from the UK. Approximately half of UK imports from North American countries in this sector were plastic products and organic chemicals. By far the largest category of North American imports from the UK was organic chemicals; intra-North American trade is concentrated in rubber and plastic products and organic and inorganic chemicals.

Barriers to Trade

For the most part, impediments to trade in the chemicals, plastics, and rubber sector are few.[27] The Uruguay Round harmonization of chemical tariffs and

[20] Based on U.S. Department of Commerce, International Trade Administration, *U.S. Industry & Trade Outlook $98*.

[21] Chemical Manufacturers Association, *U.S. Chemical Industry Statistical Handbook 1998*, Arlington, VA. Data in this section is from this source unless otherwise specified.

[22] *Statistics Canada*, Manufacturing industries of Canada: national and provincial areas, Sept. 1998.

[23] Asociacion Nacional de la Industria Quimica, A.C, *The Chemical Industry in Mexico*, found at *http://www.aniq.org.mx/aniq.htm*, retrieved May 6, 2000.

[24] ACHEMA 2000, *Perspective, UK*: *Hydrocarbon Processing*, March 2000 (value discounted 30 percent for pharmaceuticals).

[25] Chemical Industries Association, London, *UK Chemical Industry*; Chemical Manufacturers Association.

[26] ACHEMA 2000, *Perspective, UK*: *Hydrocarbon Processing*, March 2000 (value discounted 30 percent for pharmaceuticals).

[27] These barriers are described in greater detail in appendix D, tables D-17 through D-21. Sources of nontariff barrier information are given in tables D-18, D-20, and D-21.

Table 3-3
Chemicals, plastics, and rubber products: Trade for Canada, Mexico, the UK, and the United States, 1994-98

(Million dollars)

Importer	Exporter	1994	1995	1996	1997	1998
Canada	Mexico	54	102	113	103	105
	UK	343	456	445	397	421
	United States	11,344	12,555	13,486	15,454	16,229
	Rest of world	3,254	3,848	3,985	4,043	4,042
	World	14,995	16,961	18,029	19,997	20,797
Mexico	Canada	89	99	170	189	220
	UK	171	149	187	189	193
	United States	7,555	8,013	9,898	12,395	13,175
	Rest of world	2,489	2,278	2,726	3,319	3,516
	World	10,304	10,539	12,981	16,092	17,104
UK	Canada	135	170	183	167	184
	Mexico	54	69	76	89	70
	United States	2,696	3,271	3,734	3,656	3,585
	Rest of world	21,699	27,286	27,353	26,934	27,449
	World	24,583	30,796	31,346	30,846	31,288
United States	Canada	9,463	11,201	11,889	13,034	13,249
	Mexico	1,572	1,992	2,143	2,504	2,699
	UK	3,089	3,268	3,479	3,802	4,278
	Rest of world	33,343	39,392	41,972	44,740	47,124
	World	47,467	55,853	59,483	64,080	67,350

Source: *U.N. Trade Statistics*, United Nations Statistics Division, found at *http://untrade.fas.usda.gov/untrade/,* retrieved June 7, 2000.

the elimination of tariffs on pharmaceutical intermediates has lowered tariff barriers for the sector. Canada retains a 15.7 percent ad valorem duty on surgical and rubber gloves and prohibits imports of used tires from countries other than the United States. The EU feels that Canadian tariffs on rubber and plastics, which will average 6.9 percent at the end of Uruguay Round reductions, are a barrier to trade. Mexico prohibits the importation of certain chemicals for health and safety reasons, requires import authorization and licenses for most chemicals and plastics, and has implemented reference prices for chemicals. U.S. suppliers consider EU standards on certain chemicals to be unnecessarily restrictive.

Pharmaceutical products[28]

Industry and Trade

The United States is a major producer of pharmaceutical products. In 1998, total U.S. shipments amounted to approximately $95 billion, representing about 1 percent of GDP. The U.S. sector encompasses more than 700 companies that develop, manufacture, and market pharmaceutical products and employ approximately 270,000 workers. These companies consist of large, highly regulated, capital intensive multinationals driven by large research and development expenditures, smaller research companies, and companies that produce generic (off-patent) drugs. Although many of the leading world manufacturers are headquartered in the United States and the UK, these multinationals have production facilities throughout the world. U.S. competitive advantages include a well-educated workforce that supplies researchers to the sector and a large and growing domestic market for consumption. This growth has been spurred, in part, by an aging U.S. population, lack of U.S. price controls, and increased health concerns. U.S. pharmaceutical products sales nearly tripled during 1990-98, supplying approximately 40 percent of the world market.

The pharmaceutical sector in Canada is significantly smaller than that of either the United States or the UK. Total sector shipments increased 12 percent dur-

[28] This sector encompasses goods covered by chapter 30 of the Harmonized Tariff Schedule.

ing 1997-98, reaching $7.5 billion. These shipments represented approximately 1 percent of Canadian GDP. Research is a significant aspect of the Canadian sector and virtually all the large multinational, research-based companies have production and research facilities in Canada, although none are headquartered there. The sector supports approximately 42,000 workers. The Canadian sector is becoming more consolidated, and the top ten companies accounted for approximately 51 percent of total sales in 1998. Foreign direct investment is largely in the form of large multinational companies building facilities in Canada.

There are more than 400 companies in the Mexican pharmaceutical sector that employ approximately 40,000 workers. Large multinational pharmaceutical companies dominate drug sales in Mexico and most have facilities in Mexico; employees of these large multinational firms account for 60 percent of the sector workforce. However, no single enterprise has more than 8 percent of the market, and the domestic pharmaceutical sector has no research or development capacity. Approximately 70 percent of domestic sales are imported products. A black market is reported to operate in Mexico with annual sales estimated at $8 million.

The UK is also a major producer of pharmaceutical products and serves as the headquarters of some of the world's largest pharmaceutical companies. Domestic shipments of pharmaceutical products amounted to approximately $12 billion in 1998, 1 percent of the UK's GDP. The sector employs 150,000 workers and has accounted for approximately 15 percent of the new products introduced globally since 1975. Foreign direct investment is in the form of large multinational companies either merging with UK companies or building facilities in the UK.

Trade in pharmaceutical products among the four countries does not, for the most part, follow the patterns typical of other sectors (table 3-4). Most U.S., UK, and Mexican imports are from countries other than the four that are the subject of this study. The United States supplied nearly 60 percent of Canada's $2 billion of pharmaceutical product imports, but only about one-third of Mexico's $679 million of imports during 1998. Together, Canada and Mexico provided less than 10 percent and the UK accounted for just over 15 percent of the $9 billion U.S. import market. Countries outside North America supplied 85 percent of the $5 billion of UK imports of pharmaceutical products in 1998.

Barriers to Trade

Pharmaceutical products face certain EU nontariff barriers.[29] EU member states have different price, volume, and market access controls as well as differing trade name rules on a wide range of pharmaceutical products within their national markets. As a result, it is more difficult for firms to maintain trademarks and price levels throughout the EU. The EU also imposes a ban on "specified risk materials" (SRMs) that bars certain imports of pharmaceutical products and medical products incorporating gelatin in their formulations. The ban is intended to guard against the spread of harmful conditions such as bovine spongiform encephalopathy ("mad cow" disease). However, U.S. companies contend that the EU ban is much more restrictive than necessary, as there have been no reported cases of the malady in the United States. Canada claims that EU intellectual property protection is not as strong in this sector as it is in others.

Canadian nontariff barriers affect a wide range of pharmaceutical products.[30] Canadian firms are allowed to experiment and test, manufacture, and stockpile patented products 6 months before a pharmaceutical patent is due to expire. Twenty-year patent protection has been given to many, but not all, products. Firms that wish to import pharmaceutical products into Canada also face varying policies and approval processes among different Provinces. These regulations may be duplicative and add to the regulatory burden imposed on importing firms.

Mexican regulations and programs have been identified as impediments to trade in pharmaceutical products.[31] The Mexican Government controls the pricing, production, and sale of a wide variety of pharmaceutical products and the Mexican national health system gives preference to procurement of pharmaceutical products from Mexican producers. In addition, regulations appear to preclude vitamin imports and industry sources state that illegal trade in both legal and illegal drugs displaces legal trade.

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[29] These barriers are described in greater detail, with sources of nontariff barrier information, in appendix D, table D-22.

[30] These barriers are described in greater detail, with sources of nontariff barrier information in appendix D, table D-23.

[31] These barriers are described in greater detail, with sources of nontariff barrier information in appendix D, table D-24.

Table 3-4
Pharmaceutical products: Trade for Canada, Mexico, the UK, and the United States, 1994-98
(Million dollars)

Importer	Exporter	1994	1995	1996	1997	1998
Canada	Mexico	1	2	3	5	8
	UK	110	112	115	133	135
	United States	804	847	981	1,113	1,343
	Rest of world	429	523	570	644	844
	World	1,344	1,484	1,669	1,895	2,330
Mexico	Canada	7	8	10	11	11
	UK	23	20	20	26	45
	United States	120	109	171	178	236
	Rest of world	205	188	268	352	387
	World	355	325	469	567	679
UK	Canada	19	16	14	17	21
	Mexico	1	1	1	1	1
	United States	272	374	650	648	720
	Rest of world	2,662	3,350	3,355	3,882	4,207
	World	2,953	3,740	4,019	4,547	4,948
United States	Canada	305	364	428	648	650
	Mexico	9	13	20	22	25
	UK	679	824	1,192	1,309	1,459
	Rest of world	2,221	2,673	3,295	4,784	6,857
	World	3,214	3,874	4,935	6,763	8,991

Source: *U.N. Trade Statistics*, United Nations Statistics Division, found at *http://untrade.fas.usda.gov/untrade/,* retrieved June 7, 2000.

U.S. nontariff barriers to trade in pharmaceutical products affect medicinal products and sunscreens.[32] EU sources report that the FDA approval process takes longer for medicinal imports than for locally produced equivalents, thus providing an advantage to U.S. firms. For generic medicinal products, U.S. producers are allowed to prepare for registration during the period of the patent which allegedly violates patent rights. For sunscreen products, the FDA labeling requirements reportedly obscure brand name identity.

Forest products[33]

Industry and Trade

The United States is the world's largest producer of forest products and manufactures a wide variety of products such as lumber, wood panels, pulp, paper, and printed matter. Most U.S. production is consumed domestically, but exports are significant. High levels of home building and industrial construction kept demand for wood building materials high during 1994-1998, and at the same time, demand for consumer products kept production of paper and printed matter at peak levels. Production of forest products in the United States increased steadily between 1994 and 1998, reaching an estimated $490 billion, about 5 percent of U.S. GDP. In 1998, printing and publishing accounted for over 43 percent of the value of U.S. forest products production, pulp and paper production accounted for 33 percent, and wood and wood products the remainder. Employment in the sector fluctuated during the period averaging an estimated 3.1 million in 1998, about the same as in 1995.[34]

U.S. producers range from small printing shops, sawmills, and woodworking shops to large highly integrated corporations producing pulp, paper, lumber, and

[32] These barriers are described in greater detail, with sources of nontariff barrier information in appendix D, table D-25.

[33] This sector encompasses goods covered by chapters 44 through 49 of the Harmonized Tariff Schedule.

[34] Organization for Economic Co-operation and Development, *The OECD Stan Database for Industrial Analysis 1978-1997, 1998 Edition*. Data for 1997 and 1998 estimated by the staff of the USITC.

wood panels. Although producers number in the thousands, most of the U.S. production is produced by a few hundred companies. U.S. firms invest in foreign operations worldwide, but particularly in Canada. Similarly, there has been considerable foreign investment in the U.S. forest products sector by Canadian producers and in recent years by European paper, and printing and publishing firms.[35]

Canada ranks among the world's leading producers of forest products. The principal forest products of Canada include softwood lumber, wood pulp, newsprint, and printing and writing papers. In 1998, Canada's forest products production totaled an estimated $48 billion, accounting for 8 percent of GDP. Production of forest products declined in Canada from 1995 and 1998 largely due to decreased exports. Canada's forest products sector is heavily dependent on export markets and restrictions on exports to the United States, Canada's largest market, combined with declines in other markets reduced foreign sales. Since April of 1996, the volume of Canada's exports of softwood lumber to the United States has been limited by a quota agreement between the two countries. The agreement is scheduled to expire at the end of March 2001.

Pulp and paper accounted for 45 percent of the sector's output, wood and wood products for 33 percent, and printing and publishing accounted for 22 percent of output. Employment increased about 3 percent annually to an estimated 354,000 workers in 1998.[36] Canada has vast forest resources owned mostly by the Provincial Governments and leased to the sector by a variety of arrangements.[37] Canada's sector is highly concentrated and the principal producers are integrated vertically and horizontally. Two Provinces, British Columbia and Quebec, account for over 60 percent of Canadian shipments of wood and paper products. Canadian firms invest heavily around the world, and in recent years there have been significant cross-border mergers with U.S. firms.[38]

Although Mexico is a relatively small producer of forest products, it produces a wide range of products, most of which are consumed domestically. Principal items produced by the sector include sawlogs and veneer logs, lumber, plywood, moldings, picture frames, bleached kraft pulp, printing and writing paper, corrugated materials, tissue products, newspapers, magazines, and books. Production of forest products in Mexico increased steadily during 1994-98, reaching an estimated $13 billion, equivalent to approximately 3 percent of Mexican GDP. Paper and paper products accounted for 45 percent of the sector's output, printing and publishing accounted for about one-third of output, and wood products accounted for about one-quarter. Annual employment in the sector during the period was flat at about 250,000 workers.[39] The Mexican forest products sector has attracted foreign direct investors seeking to take advantage of growing Mexican demand for forest products and to use the country as a production base for export to the United States. Mexico lacks the extensive forest resources of the United States and Canada and forest productivity in the country is low. Many forest products producers in Mexico have relatively small operations, and thus lack the economies of scale enjoyed by producers in the United States and Canada.[40] In the printing and publishing area, many Mexican producers are small, lack capital, and have outdated production equipment.[41] Nevertheless, the developing Mexican economy and growing population have created increased demand for reading material in Spanish, a demand that Mexican publishers are well suited to meet.

The UK is not a major producer of wood products but does have a sizeable paper and paper products industry and a notable printing and publishing industry. Principal items produced by the forest products sector in the UK include lumber, wood-based panels, newsprint, printing and writing paper, corrugated materials, newspapers, books, and magazines. Production of forest products in the UK rose steadily during 1994-98, reaching an estimated $79 billion in 1998, a 5.6-percent share of the country's GDP. Printing and publishing accounted for 57 percent of the sector's total output, followed by paper and paper products (31 percent) and wood products (12 percent). Employment in the forest products sector was stable

[35] Pulp & Paper, *1999 North American Factbook-World Review*, (San Francisco: Miller Freeman, 1998), pp. 44-46.

[36] Organization for Economic Co-operation and Development, *The OECD Stan Database for Industrial Analysis 1978-1997, 1998 Edition*. Data for 1997 and 1998 estimated by the staff of the USITC.

[37] Natural Resources Canada, *The State of Canada's Forests, 1996-1997*: (Canada, Ottawa, 1997) p. 33.

[38] Pulp & Paper, *1999 North American Factbook-World Review* (San Francisco: Miller Freeman, 1998). pp. 44-46.

[39] Organization for Economic Co-operation and Development, *The OECD Stan Database for Industrial Analysis 1978-1997, 1998 Edition.* U.S. Department of State, *FY 2000 Country Commercial Guide: Mexico*, July 1999. Data for 1997 and 1998 estimated by the staff of the USITC.

[40] U.S. Department of Agriculture, Foreign Agriculture Service, *Forest Products Annual Report Mexico 1998*, Mexico City, AGR No. MX8124, Oct. 16, 1998.

[41] U.S. Department of Commerce, International Trade Administration, *Market Research Report, Mexico-Printing/ Graphic Arts Equip./Supplies*, Aug. 1999.

during the period, totaling about 625,000.[42] Foreign direct investment in the sector is driven by foreign producers seeking business opportunities not only in the UK, but in the EU as well. The production facilities of wood and paper producers in the UK have not developed to the same scale as those in the United States and Canada because of the lack of forest resources. Consequently, the UK is dependent upon imports of wood and paper to meet domestic demand. Paper producers must import fiber to run their mills and face fierce competition from rising paper imports.[43] The printing and publishing sector in the UK enjoys the advantages of a literate and affluent population, providing it with a large market for mass circulation publications as well as special-interest titles. The sector also benefits from the worldwide spread of English as second language and the consequent foreign demand for English language publications.

[42] Organization for Economic Co-operation and Development, *The OECD Stan Database for Industrial Analysis 1978-1997, 1998 Edition.* International Monetary Fund, *International Financial Statistics*, March 2000. Data for 1997 and 1998 estimated by the staff of the USITC.

[43] Amanda Marcus, "All Not OK in the UK," *PIMA's Papermaker*, Aug. 1998.

Most imports of forest products by the United States, Canada, and Mexico come from within North America. The United States supplied over 85 percent of Canada's imports, valued at $7 billion, and 86 percent of Mexico's sector imports valued at $4 billion in 1998 (table 3-5). Two-thirds of U.S. imports ($22 billion) came from Canada the same year. The strong trade within North America results from proximity and indicates both the abundance of natural resources and the competitive conditions in the wood and paper industries of Canada and the United States. The EU also has a large and competitive wood and paper industry, especially in the Scandinavian countries, and is the source of most of the UK's $14 billion in imports in 1998.

Barriers to Trade

There are few impediments to trade in this sector. The most significant barriers are Mexico's system of reference prices and Canadian and Mexican prohibitions on the importation of printed material.[44]

[44] These barriers are described in greater detail in appendix D, tables D-26 through D-28. Sources of nontariff barrier information are identified in tables D-26 and D-27.

Table 3-5
Forest products: Trade for Canada, Mexico, the UK, and the United States, 1994-98
(Million dollars)

Importer	Exporter	1994	1995	1996	1997	1998
Canada	Mexico	11	15	12	16	27
	UK	115	120	107	129	145
	United States	5,107	6,072	5,853	6,579	6,669
	Rest of world	629	712	679	773	882
	World	5,862	6,919	6,651	7,497	7,723
Mexico	Canada	139	111	65	103	87
	UK	21	21	18	21	16
	United States	2,985	2,874	3,026	3,452	3,730
	Rest of world	624	393	347	477	513
	World	3,769	3,399	3,456	4,053	4,346
UK	Canada	653	782	723	640	555
	Mexico	1	10	10	18	31
	United States	1,281	1,682	1,915	1,629	1,575
	Rest of world	10,750	12,585	11,870	12,247	12,256
	World	12,685	15,059	14,518	14,534	14,417
United States	Canada	17,133	20,633	20,721	21,483	22,023
	Mexico	563	788	850	974	1,021
	UK	669	725	739	766	833
	Rest of world	7,127	8,548	8,143	8,819	9,818
	World	25,492	30,694	30,453	32,042	33,695

Source: *U.N. Trade Statistics*, United Nations Statistics Division, found at *http://untrade.fas.usda.gov/untrade/*, retrieved June 7, 2000.

Textiles, apparel, and footwear[45]

Industry and Trade

The U.S. textile, apparel, and footwear sector continued to decline by most measures in recent years as it faces growing competitive pressures from the gradual elimination of U.S. import quotas on textiles and apparel, the ongoing globalization of garment production, and the increasing concentration of buying power in the U.S. retail industry among fewer but larger retailers. Total sector employment fell by 18 percent during 1994-98, to 1.4 million employees. Output rose by nearly 2 percent for textiles, but decreased by 6.5 percent for apparel and by 32 percent for footwear during the period. Sector shipments totaled about $162.6 billion, or just under 2 percent of U.S. GDP, in 1998. The sector's share of U.S. manufacturing employment fell from 9.4 percent in 1994 to 7.5 percent in 1998, and its share of U.S. manufacturing shipments declined from 4.7 to 4.0 percent.

As the U.S. industry declines, imports, largely from countries with lower production costs, have grown to account for 55 percent to 60 percent of the total value of the U.S. apparel market and 84 percent of the U.S. footwear market. To remain competitive, U.S. apparel companies have responded by developing a globalized manufacturing base, particularly in countries in the Western Hemisphere that benefit from preferential access to the U.S. market, namely Mexico, Canada, and beneficiary countries under the Caribbean Basin Economic Recovery Act (CBERA). The U.S. textile industry is one of the world's most efficient textile producers, achieving high levels of productivity in high-volume commodity goods and in printing, dyeing, and finishing operations. U.S. textile mills have invested in the latest technology to improve manufacturing flexibility in an effort to coordinate production and marketing with the needs of their downstream apparel customers. In addition, several U.S. textile companies have established operations to produce fabrics in other countries, notably Mexico, in order to be closer to their apparel-producing customers.

The Canadian textile and apparel industries consist of over 2,500 establishments, which in 1998 accounted for about 7.7 percent of Canada's manufacturing employment and 3.2 percent of manufacturing output. The industries grew significantly during 1994-98, as their total shipments rose by 16.7 percent to $14.5 billion and employment advanced by 9.8 percent to 143,500 people. Major textile products of the industry include manmade fibers, filaments and fabrics, and home textiles. Apparel production is concentrated in women's sportswear and fur goods, men's and boys' shirts, underwear, suits, and jackets. The Canadian textile and apparel industries have attracted significant foreign investment in primary textiles as foreign-controlled textile companies, primarily U.S.-owned, accounted for about 60 percent of aggregate primary textile shipments. The Canadian footwear industry consists of about 85 establishments with total shipments of $551 million in 1997, down 19 percent from the 1994 level, and employs 7,600 people. Unlike the textile and apparel industries, the Canadian footwear industry has declined in terms of output and employment since 1994. In spite of high labor costs characteristic of developed countries, Canada's textile, apparel, and footwear sector is competitive mostly in textile products and in certain niche apparel and footwear markets, such as winter-related footwear and men's wool suits. The sector is characterized by flexibility, the ability to respond quickly to fashion trends and retailers' needs, and the ability to accommodate smaller runs of innovative and high-valued products.

Mexico's textile and apparel sector, especially the apparel industry, has been expanding rapidly since the implementation of NAFTA and a major currency devaluation in 1994. Employment in Mexico's textile industry grew by 5 percent annually to 166,500 workers during 1994-97; employment in the apparel industry grew at nearly twice that rate to 450,000 in 1996. Most U.S. apparel imports from Mexico became duty-free under NAFTA on January 1, 1999. As a result, U.S. and some Asian firms also are establishing textile and apparel manufacturing facilities in Mexico. As of December 1998, 603 textile and apparel firms in Mexico had been established with foreign direct investment. Although most of these firms were U.S.-owned, more than 10 percent were subsidiaries of Asian companies. Mexico's production of footwear totaled 170 million to 180 million pairs during 1995-96. The Mexican footwear industry is recovering from the economic crisis of 1994, aided by increased exports, which became less expensive because of the devalued peso. Challenges remain for the industry, which is in need of investment to upgrade its footwear factories with the latest technology.

The UK textile and apparel industries employed about 350,000 people in approximately 14,000 establishments and shipped $21 billion worth of textiles and apparel in 1998. Slightly more than three-fourths of the

[45] This sector encompasses goods covered by chapters 50 through 67 of the Harmonized Tariff Schedule.

establishments employed fewer than 20 people each. The textiles, apparel, and footwear sector (including other leather products) accounted for roughly 1 percent of UK GDP. Production in the UK textile and apparel industries declined by 11 percent between 1994 and 1998 as a result of intense competition from low-cost imports and a strong British pound. Major textile products of the industry include yarn, fabrics, carpets, and home textiles. Apparel production is concentrated in men's and women's outerwear, women's underwear, and knit pullovers and cardigans. The UK is one of the major EU members producing high-priced apparel in sufficiently large quantities to supply export markets. The UK footwear industry consists of roughly 500 firms, which employed about 24,000 people and shipped nearly $2 billion worth of shoes in 1997. Although employment in the UK shoe industry declined from 28,000 in 1994 to 24,000 in 1997, its shipments rose by 9 percent between 1994 and 1996, as the industry is gradually carving a niche as an international center of quality, high-end footwear manufacture.

NAFTA provisions that give duty and quota preferences to imports of North American origin have spurred trade among participating countries. Since the implementation of NAFTA in 1994, Mexico has become the largest U.S. supplier of sector imports in terms of quantity and value, and Canada has become the second largest supplier of sector imports in terms of quantity. U.S. sector imports from Mexico rose by 223 percent in value terms during 1994-98 accounting for 10 percent of the total sector imports during 1998 (table 3-6). Mexican sector imports from the United States more than doubled during the same period. In spite of Mexico's and Canada's importance as two of the largest suppliers of U.S. sector imports, approximately 85 percent of the value of U.S. sector imports were from other sources.[46] More than 95 percent of $23 billion of sector imports into the UK were from countries other than the United States, Canada, and Mexico in 1998.

[46] Approximately 14 percent of U.S. sector imports came from CBERA countries in 1998 and were granted preferential quota and tariff treatment.

Table 3-6
Textiles, apparel, and footwear: Trade for Canada, Mexico, the UK, and the United States, 1994-98
(Million dollars)

Importer	Exporter	1994	1995	1996	1997	1998
Canada	Mexico	53	84	116	158	183
	UK	100	103	99	103	86
	United States	2,417	2,730	2,901	3,372	3,540
	Rest of world	3,707	3,961	3,681	4,313	4,582
	World	6,277	6,878	6,797	7,946	8,391
Mexico	Canada	22	24	34	39	45
	UK	14	6	10	13	11
	United States	3,149	3,407	4,393	5,742	6,787
	Rest of world	1,342	652	703	1,108	1,203
	World	4,527	4,089	5,140	6,902	8,046
UK	Canada	48	53	59	61	59
	Mexico	14	22	36	30	16
	United States	608	734	823	841	763
	Rest of world	16,156	17,967	19,883	21,996	22,578
	World	16,826	18,776	20,801	22,928	23,416
United States	Canada	1,730	2,059	2,454	2,903	3,248
	Mexico	2,615	3,944	5,134	6,951	8,441
	UK	663	694	739	900	933
	Rest of world	54,514	56,997	58,093	65,405	69,748
	World	59,522	63,694	66,420	76,159	82,370

Source: *U.N. Trade Statistics*, United Nations Statistics Division, found at *http://untrade.fas.usda.gov/untrade/,* retrieved June 7, 2000.

Barriers to Trade

The EU has cited a number of regulations that it feels impede trade with North America in this sector.[47] These include NAFTA rules of origin that give preferential treatment to textiles and apparel made from yarn or fibers of North American origin. Other barriers cited by the EU are Mexican and U.S. labeling requirements, the Canadian value-added tax, Mexican reference prices, and information required by customs agencies that is considered burdensome and unnecessary.

The EU claims that high tariffs in this sector create significant barriers to trade with the United States and Canada.[48] Canadian tariffs on textiles and apparel range from 15 percent to 18 percent. U.S. tariff rates for textiles range from 15.5 percent to 25 percent, those for apparel articles range from 15.6 percent to 33.3 percent, and certain footwear is subject to tariffs of 20.9 percent to 58.8 percent. EU tariffs for textiles range from 7 percent to 13 percent, and for apparel, rates range from 8 percent to 13 percent. The EU imposes tariffs ranging from 3 percent to 17 percent on footwear. Slightly more than one-third of the value of UK footwear imports consist of footwear dutiable at 17 percent.[49]

Minerals and metals[50]

Industry and Trade

The U.S. minerals and metals sector is much larger than that of the other three countries. The United States is a major world producer of many sector products. Minerals and metals include a broad range of mining, processing, and fabrication operations. Although the U.S. sector generally expanded during 1994-98, it trailed the 24 percent growth in U.S. GDP.[51] The value of total sector shipments increased by 13 percent during 1994-98 to an estimated $375 billion in 1998, representing 4 percent of GDP. Estimated employment increased by 5 percent to more than 2 million employees. Metals and metal articles accounted for 76 percent of sector shipments in 1998; mining and nonmetallic mineral products represented the remaining $91 billion in 1998 sector shipments. The abundance and diversity of U.S. mineral resources are the U.S. industry's greatest competitive strength relative to the other three countries, although Canada and Mexico may have higher quality or more extensive deposits for specific minerals. The U.S. advantage in natural resources is most pronounced over the UK, which has limited nonfuel mineral resources and meets most demand for industrial raw materials through imports.[52] Direct foreign investment in the United States totaled $5 billion for the period and was roughly equally divided between the UK and Canada.

The Canadian minerals and metals sector expanded during 1994-98 in large measure on the strength of exports to the United States, and outperformed the 17-percent growth in the Canadian GDP. In addition, U.S. direct investment in primary and fabricated metals with the three other countries was concentrated in Canada and totaled more than $1 billion during 1994-98. The value of total Canadian shipments in this sector increased by an estimated 38 percent during the period to $46 billion in 1998, representing 8 percent of GDP. Employment increased by an estimated 102,000 to nearly 370,000 employees in 1998. Primary metals and fabricated metal products represented 79 percent of sector shipments in 1998, and mining and nonmetallic mineral products represented the remaining 21 percent. As with the United States, the relative abundance of Canada's mineral deposits provides a competitive advantage for Canada, which has sufficient resources to not only meet domestic demand but also to be the world's largest exporter of minerals and metals.[53] The availability of higher grade ores gives Canada a competitive advantage for certain minerals and metals.

The expansion of Mexico's minerals and metals production during 1994-98 was based on the strength of exports to the United States to a great extent, and the sector outperformed the 167 percent growth in Mexico's GDP for the period. The value of Mexican shipments increased by approximately 182 percent during 1994-98 to $15 billion in 1998, representing 4 percent of GDP.[54] The value of U.S. imports from Mexico for

[47] These barriers are described in greater detail, with sources of nontariff barrier information, in appendix D, tables D-30, D-32, and D-33.

[48] These barriers are listed in appendix D, tables D-31 and D-34.

[49] This barrier is listed in appendix D, table D-29.

[50] This sector encompasses goods covered by chapters 25, 26, and 68 through 83 of the Harmonized Tariff Schedule.

[51] The most notable exceptions to growth in this industry were in the iron and steel scrap and copper segments that were adversely affected by weak demand in Asian markets in 1998.

[52] U.S. Geological Survey, *The Mineral Industry of Canada–1997*, p. F3, downloaded from *http://minerals.usgs.gov/pubs/country/latin.html#ca* on Mar. 3, 2000.

[53] Economist Intelligence Unit,"Production: Mining & Semi-Processing," *Country Profiles*, Oct. 27, 1997, CD ROM.

[54] Data are understated to the extent that information was unavailable for the metal-products segment of the industry. Data do include the basic-metal segment of the industry. Estimates of industry share of GDP based on Banco de Mexico, *The Mexican Economy 1999*, July 1999, pp. 217-218.

this sector increased by 84 percent (nearly $3 billion) during this period. Iron and steel and its products were Mexico's most significant exports for this sector, representing 42 percent of the value of the sector's exports in 1998. Mexico's competitive advantages for this sector include lower labor and environmental compliance costs. Employment for the nonmetallic mineral and basic metal segments declined by 5 percent during 1994-98 to 129,000.

Shipments in mining and quarrying outperformed the 19 percent growth in UK GDP for 1994-97, increasing in value by 25 percent.[55] The value of shipments for this segment were estimated at $93 billion in 1997, representing 7 percent of UK GDP.[56] Comparable data were not available for 1998. Iron and steel, and articles of these metals, comprised the largest share of UK sector exports, reaching 32 percent in 1998.

[55] These data may not accurately reflect industry trends, since they include energy producing materials that fall outside the scope of this industry and exclude data for basic metals and fabricated metal products.

[56] Data include mining and quarrying, except energy producing materials, nonmetallic mineral products, basic metals, and fabricated metal products.

Import patterns for metals and metal products are largely determined by transportation costs, availability of natural resources, and the level of integration of manufacturing operations. The relatively high cost of shipping products in this sector has discouraged trade with the relatively distant UK and encouraged trade between the United States and its two closest neighbors. Canada's abundance of mineral resources relative to Mexico and the UK made it a natural source of raw materials for the U.S. market. The increasing integration of North American operations by manufacturers has encouraged U.S. exports of semimanufactured products for this sector to Canada and Mexico for incorporation into products that are shipped back to the United States for consumption. U.S. exports of automotive parts that are shipped back to the United States in the form of assembled automobiles are typical examples of such trade. However, shipments from Canada and Mexico made up less than 29 percent of the $91 billion in U.S. imports in this sector in 1998 (table 3-7). Similarly, more than 86 percent of the $32 billion in UK imports in 1998 were from countries other than the United States, Canada, and Mexico.

Table 3-7
Minerals and metals: Trade for Canada, Mexico, UK, and the United States, 1994-98
(Million dollars)

Importer	Exporter	1994	1995	1996	1997	1998
Canada	Mexico	126	200	183	271	265
	UK	368	374	352	373	424
	United States	9,610	10,728	10,789	13,056	13,225
	Rest of world	4,122	4,640	4,476	5,037	5,729
	World	14,226	15,942	15,800	18,737	19,643
Mexico	Canada	183	159	218	253	261
	UK	61	43	56	71	80
	United States	5,446	5,790	7,310	8,948	9,994
	Rest of world	2,399	1,832	2,380	3,239	3,827
	World	8,089	7,824	9,964	12,511	14,162
UK	Canada	574	773	842	789	819
	Mexico	46	106	94	110	110
	United States	1,515	2,432	2,434	2,835	3,354
	Rest of world	22,057	25,441	26,613	27,792	27,671
	World	24,192	28,752	29,983	31,526	31,954
United States	Canada	13,587	15,668	16,501	17,670	17,711
	Mexico	3,421	4,640	5,108	5,644	6,291
	UK	1,972	2,087	2,198	2,454	2,801
	Rest of world	46,110	49,235	50,828	56,282	64,459
	World	65,090	71,630	74,635	82,050	91,262

Source: *U.N. Trade Statistics*, United Nations Statistics Division, found at *http://untrade.fas.usda.gov/untrade/,* retrieved June 7, 2000.

Barriers to Trade

Research has identified few impediments to trade in this sector.[57] Canadian tariffs on certain products of asbestos or glass fibers reach 15.7 percent and the EU claims that Canadian tariffs on pottery and china are barriers. U.S. duties on certain low-value flatware range from 16 percent to 25 percent, on certain other tableware and glassware from 15 percent to 28.5 percent, and are 15 percent on certain titanium products. Mexican nontariff barriers in this sector concern burdensome testing procedures for ceramic tile imports and reference prices for steel. U.S. aircraft fastener regulation, "Buy American" restrictions, and U.S. sub-Federal content requirements are identified as U.S. nontariff barriers.

Machinery and Transportation Equipment[58]

Industry and Trade

During 1994-98, U.S. machinery and transportation equipment sector production accounted for approximately 15 percent of U.S. GDP, and the United States was the leading world producer in most industries in this sector. During this period, U.S. production in this sector rose by 30 percent to $1.4 trillion and employment rose 9 percent to 5.8 million persons. Production of transportation equipment (primarily motor vehicles and aircraft and parts) accounted for 40 percent of sector production in 1998, industrial machinery and equipment accounted for 33 percent, and electronics and electrical equipment accounted for the remaining 27 percent. U.S. producers have relatively high labor costs and are at a disadvantage in labor-intensive industries such as consumer electronics, but greater productivity and technological expertise are competitive advantages in industries such as motor vehicles, aircraft, and computers. During 1994-98, net inflows of foreign investment into the U.S. machinery sector totaled $10.6 billion from Canada and $3.4 billion from the UK, whereas a net outflow of $6 million resulted from liquidation of existing Mexican investments.[59]

Canadian production of machinery and transportation equipment accounted for 15 percent of Canada's GDP in 1994, rising to 17 percent in 1998. During 1994-98, Canadian production of machinery and transportation equipment rose by 33 percent. Employment in the sector rose from 451,000 persons in 1994 to 468,000 persons in 1998. Transportation equipment accounted for 67 percent of total sector production; electronics and electrical equipment accounted for 21 percent; and machinery accounted for 12 percent. Canadian producers are competitive in terms of product quality in automotive production, corporate jet production, and niche markets of machinery production. Canadian labor costs tend to be lower than those of the United States and the UK, but much above those of Mexico for this sector. Net U.S. foreign direct investment in Canada, mostly in transportation equipment, totaled $6.5 billion during 1994-98.

Production of machinery and transportation equipment accounted for 19 percent of Mexico's GDP throughout 1994-98. Mexico's production valued in U.S. dollars in this sector declined slightly from $78 billion in 1994 to $76 billion in 1998, but rose by 167 percent valued in Mexican pesos. Employment rose from 2.1 million in 1994 to 2.6 million in 1998. Most of Mexico's production in this sector is concentrated in the electronics and electrical equipment and motor vehicle industries, both of which are highly integrated with U.S. production. Because it lacks sufficient development of a heavy industrial base, Mexico has specialized in electronic and electrical equipment production as well as automotive and parts assembly. Mexico's chief competitive advantages are low cost labor and its proximity to the U.S. market. Mexico has attracted foreign investment in the assembly of goods that require labor intensive manufacturing processes, but is less competitive in the production of machinery made with capital-intensive processes. U.S. investment in Mexico was $1.6 billion, mostly in transportation equipment.

UK production of machinery and transportation equipment accounted for 17 percent of GDP in 1994 and declined to 14 percent of GDP in 1998. During this period, UK production of sector products rose by 2 percent to $198.2 billion. Employment in this sector rose from 1.1 million in 1994 to 1.2 million in 1998, or by 9.6 percent. In 1998, UK production of transportation equipment accounted for 40 percent of total sector production, electronics and electrical equipment accounted for 34 percent, and industrial machinery

[57] These barriers are described in greater detail in appendix D, tables D-35 through D-38. Sources of nontariff barrier information are given in tables D-36 and D-37.

[58] This sector encompasses goods covered by chapters 84 through 91 of the Harmonized Tariff Schedule.

[59] U.S. Department of Commerce, Bureau of Economic Analysis, *International Accounts Data*, "U.S. Direct Investment Abroad, Capital flows" (detailed annual country by industry tables); and "Foreign direct investment in the United States, Capital flows" (detailed annual country by industry tables), found at Internet address *http://www.bea.doc.gov*, retrieved Apr. 13, 2000.

accounted for 26 percent. In this sector, the UK benefits from having an educated workforce and established companies in certain market niches. However, sector workforce wages in the UK are relatively high compared with those in the United States, Mexico, and Canada. During 1994-98, net U.S. foreign direct investment in the UK for this sector was $11.5 billion ($5.9 billion in industrial machinery, $4 billion in transportation equipment, and $1.5 billion in electronics products and electrical equipment).

Canadian and Mexican import patterns for machinery and transportation equipment products clearly indicate the degree to which this sector is integrated in North America. The motor vehicle and electronics industries, in particular, are the major drivers of this trading pattern. The United States supplied more than 70 percent of both Canada's and Mexico's 1998 imports of sector products. Sector imports totaled $113 billion for Canada and $64 billion for Mexico. About 30 percent of the $461 billion U.S. sector imports are from Canada and Mexico (table 3-8). Although 20 percent of UK imports of $152 billion were from North American countries in 1998, only 3 percent of North American imports were from the UK. U.S. and Canadian exports tend to be parts for assembly operations that are subsequently exported principally to the United States and Canada as finished products. Mexico imports industrial machinery from the United States, Canada, and the UK. U.S. imports from Canada and Mexico are dominated by motor vehicle and aircraft trade. UK imports from Canada, Mexico, and the United States are predominately of industrial machinery.

Barriers to Trade[60]

Most nontariff barriers reported in this sector pertain to motor vehicles. The Automotive Products Trade Agreement gives preferential treatment to signatories, principally U.S. and Canadian suppliers, over EU suppliers for trade in motor vehicles and parts between the two countries. In addition, Canada prohibits the importation of used motor vehicles, except from the United States. In Mexico, motor vehicle assemblers and manufacturers must register with the Mexican Government and licenses are needed to import certain products. Imports of motor vehicles into Mexico must meet certain Mexican content requirements and be balanced against certain export levels that also have Mexican local content. Various Mexican, U.S., and EU taxes and fees on motor vehicles have also been cited as impediments. The EU imposes environmental regulations on motor vehicle disposal and motorcycle emissions. In the United States, labeling requirements that specify the country of origin of vehicle parts are reported to be unnecessarily detailed.

Impediments to trade in the aircraft and shipbuilding industries also were reported. In the EU, both industries receive subsidies. However, in the EU, allowable shipbuilding subsidies are scheduled to be reduced to zero in 2000. Aircraft subsidies in the United States, the EU, and Canada are regulated by an international agreement. Regarding assistance to the shipbuilding industry, the Canadian Government reserves the coastal trade for domestically produced and registered vessels. This type of control also exists in the United States. With respect to aviation and maritime industries, certain benefits conferred by EU law are reserved for majority-owned EU firms. Aircraft standards and certification issues exist in the United States and the EU and various restrictions are imposed by Canada and the United States on the repair, importation, and use of ships and vessels.

Impediments to trade also have been cited in other industries. Local production is favored in Canadian public sector purchases of heavy machinery, especially power generating machinery. Imports into Mexico of some types of used industrial, mining, and construction machinery require import licenses. There is discrimination against non-EU bids in the EU telecommunications industry. Further, EU export controls inhibit trade in software and satellites and directives on electromagnetic compatibility and electrical and electronic waste have been named as barriers in this sector. Testing and certification of medical equipment in Canada, Mexico and the United States were also cited as barriers.

There are significant tariff barriers in the machinery and transportation equipment sector. EU tariffs on motor vehicles and chassis range from 16 percent to 22 percent and that on bicycles is 15 percent. U.S. tariffs on color cathode-ray tubes are 15 percent; on trucks, 25 percent; on watches and clocks, 15 percent to 24 percent, and on rifle scopes, 16 percent. Canada did not bind its tariffs in the Uruguay Round on many ships and vessels and the applied rate is 20 percent to 25 percent. Canada also imposes high tariffs on items

[60] These barriers are described in greater detail in appendix D, tables D-39 through D-45. Sources of nontariff barrier information are given in tables D-39, D-41, D-43, and D-44.

Table 3-8
Machinery and transportation equipment: Trade for Canada, Mexico, the UK, and the United States, 1994-98

(Million dollars)

Importer	Exporter	1994	1995	1996	1997	1998
Canada	Mexico	2,503	2,961	3,378	3,740	3,862
	UK	1,292	1,408	1,612	1,887	2,071
	United States	59,347	64,664	67,623	77,896	80,921
	Rest of world	18,860	21,580	20,650	24,910	25,836
	World	82,002	90,613	93,263	108,433	112,690
Mexico	Canada	523	450	741	915	1,023
	UK	304	193	290	445	479
	United States	22,858	24,404	33,440	40,910	47,726
	Rest of world	9,813	8,319	9,755	12,790	14,277
	World	33,498	33,366	44,226	55,060	63,505
UK	Canada	979	1,329	1,391	1,355	1,937
	Mexico	103	103	148	180	240
	United States	17,626	19,660	22,295	20,672	27,546
	Rest of world	81,445	96,716	107,063	123,273	122,563
	World	100,153	117,808	130,896	145,480	152,286
United States	Canada	59,902	65,850	69,616	74,466	79,783
	Mexico	29,113	35,628	43,461	50,400	58,342
	UK	11,632	13,045	14,053	17,362	18,295
	Rest of world	234,276	266,318	266,651	287,364	304,594
	World	334,923	380,841	393,781	429,592	461,014

Source: *U.N. Trade Statistics*, United Nations Statistics Division, found at *http://untrade.fas.usda.gov/untrade/,* retrieved June 7, 2000.

with significant textile content such as seat covers for motor vehicles, 15.8 percent, and parachutes and rotochutes, 15.7 percent.

Miscellaneous products[61]

Industry and Trade

The United States has the largest miscellaneous products sector among these four countries. Estimated production increased gradually and without interruption by 20 percent during 1994-98 to $163.2 billion in 1998, amounting to 2 percent of U.S. GDP in 1998. Furniture, prefabricated buildings, lamps and lamp fittings, and sporting goods collectively accounted for 68 percent of U.S. sector production in 1998.[62] Total sector employment increased by 9 percent to 981,000 during 1994-98. While actual data are not available, anecdotal information suggests that foreign direct investment is neither significant nor growing. Although the U.S. sector is large, the United States does not have a competitive advantage in this sector as a whole because many products require labor-intensive manufacturing processes. U.S. production tends to be concentrated in niche products based on consumer preference and/or fashion considerations, and on speed of delivery and proximity to customers. However, furniture and prefabricated buildings experienced less import competition than most other sector products due to the high transportation costs associated with large, heavy products.

[61] This sector encompasses goods covered by chapters 41 through 43, and 92 through 97, of the Harmonized Tariff Schedule. Miscellaneous products consist of a diverse mixture of goods from a number of industries not readily identifiable with the economic sectors already discussed. They include products such as musical instruments, firearms, furniture, brooms, artwork, and leather goods.

[62] Furniture's share of total sector production was 45 percent.

Canadian production in this sector increased during 1994-98 by about 32 percent to $11.9 billion, representing about 2 percent of GDP in 1998.[63] Estimated total Canadian employment for this sector increased by 23 percent to 159,100 during 1994-98. Furniture is the largest segment, accounting for 44 percent of sector production in 1998. A large share of such production is accounted for by U.S.-based manufacturers assembling car seats in Canada. Low-cost lumber allows Canadian wood furniture to be priced competitively in adjacent regions in the United States. Although foreign direct investment in the Canadian sector is not significant, except in car seat assembly, some of the leading U.S. furniture companies have manufacturing facilities in Canada.

Mexican production of sector products amounted to $6.2 billion[64] in 1998, accounting for 2 percent of GDP that year. Estimated employment was 155,000 workers in 1998. Mexico has attracted significant foreign investment in the sector to take advantage of low labor costs and duty-free access to North American and Latin American countries with which Mexico has free trade agreements. Exports to the United States amounted to 60 percent of Mexico's production in the sector in 1998. Furniture and car seats accounted for roughly two-thirds of sector production in 1998. Several small-to-medium sized producers of wood furniture have shifted production from California to Tijuana because of the stringent pollution restrictions in the Los Angeles Basin and lower labor costs in Mexico. Most wood furniture imported from Mexico is sold in California. Leading foreign investors in the miscellaneous products sector in Mexico are Johnson Controls, Lear, and Magna (motor vehicle seats); Mattel (dolls and toys); Bic (pens); and Samsonite (luggage).

UK production of sector products increased by 35 percent to $26.5 billion during 1994-98.[65] As with the United States, Mexico, and Canada, sector production was about 2 percent of GDP in 1998. Estimated total employment held steady at 200,000 during 1994-98. Furniture manufacturing accounted for more than 50 percent of estimated production during 1994-98. The competitive conditions that apply to the UK for this sector are similar to those of the United States. The UK's competitive disadvantage in labor-intensive products restricts its export prospects for these goods, while the high cost of shipping products such as furniture protects domestic manufacturers from foreign competition. Three U.S. companies and one Canadian company have assembly plants in the UK to supply office furniture to the UK market.

Total North American imports of miscellaneous products from all sources were $62 billion and total UK imports of these products were $12 billion in 1998. The United States was the principal source of Canadian and Mexican imports of these products in 1998, but these two countries together supplied less than one-fifth of U.S. imports of miscellaneous products. Because of the much greater size of the U.S. market, the assembly of goods for export to the United States accounts for a larger share of total trade for Canada and Mexico than trade with Canada and Mexico does for the United States. The most significant item in intra-North American trade in both directions was furniture, largely because of exports of motor vehicle seat components from the United States and imports of assembled vehicle seating from Canada and Mexico. Furniture and motor vehicle seats accounted for 54 percent ($2 billion) of Mexico's exports to the United States from export-processing plants in 1998, followed by dolls, toys, games, and sporting goods (24 percent); writing instruments (8 percent); and luggage, handbags, and flatgoods (7 percent). UK imports from North American countries accounted for 21 percent of total imports of these products in 1998 (table 3-9). The bulk of UK sector imports were from the United States and were works of art and collectibles.

Barriers to Trade

U.S. and Canadian tariffs for certain products in this category, reference prices in Mexico, and EU regulation presented the most significant barriers to trade among the four countries. The United States has significant Uruguay Round final bound tariffs on imports of certain trunks, suitcases, handbags, sports bags, and certain brooms and the EU claims that tariffs as high as 13.5 percent on jewelry are significant. Canada's Uruguay Round final bound tariffs are 15.7 percent on a number of products that have significant textile or footwear content. These products include sleeping bags, mops, powder puffs, sporting goods, and typewriter ribbons. Also, Canada did not bind its tariffs on postage-related collectors' pieces. Mexico has reference prices on toys and burdensome

[63] Estimated based on Statistics Canada, *Value of shipments of goods of own manufacture, by industry group*, found at Internet site *http://www.statcan.ca/english/Pgdb/Economy/Manufacturing/manuf13.htm*, retrieved Mar. 29, 2000 and United Nations Industrial Development Organization, *International Yearbook of Industrial Statistics 1999* (Vienna: UNIDO, 1999), pp. 199-202.

[64] Estimated based on Banco de Mexico data on non-maquiladora production by "other industries" and INEGI data on exports from the maquiladora (export-processing) plants.

[65] Estimated based on data from the United Nations Industrial Development Organization, *International Yearbook 1999*, pp. 659-661 and Office of National Statistics, *Annual Business Inquiry (Production and Construction) 1997 Revised*, found at Internet site *http://www.statistics.gov.uk/statbase/xsdataset.asp*, retrieved Apr. 10, 2000.

Table 3-9
Miscellaneous products: Trade for Canada, Mexico, the UK, and the United States, 1994-98
(Million dollars)

Importer	Exporter	1994	1995	1996	1997	1998
Canada	Mexico	244	223	230	280	297
	UK	53	74	58	79	87
	United States	2,797	2,896	2,998	3,328	3,532
	Rest of world	2,140	2,401	2,240	2,594	2,884
	World	5,234	5,594	5,526	6,281	6,800
Mexico	Canada	29	21	25	43	32
	UK	16	5	7	10	11
	United States	1,538	1,143	1,493	2,043	2,150
	Rest of world	744	428	449	657	800
	World	2,327	1,597	1,974	2,753	2,993
UK	Canada	94	120	133	128	158
	Mexico	27	14	8	15	25
	United States	1,591	1,644	1,643	1,794	2,321
	Rest of world	6,871	7,182	7,624	8,703	9,536
	World	8,583	8,960	9,408	10,640	12,040
United States	Canada	2,903	3,484	4,090	4,751	5,412
	Mexico	2,228	2,527	3,015	3,581	4,171
	UK	1,236	1,498	1,370	1,531	1,671
	Rest of world	28,721	30,577	32,734	37,596	41,210
	World	35,088	38,086	41,209	47,459	52,464

Source: *U.N. Trade Statistics*, United Nations Statistics Division, found at *http://untrade.fas.usda.gov/untrade/,* retrieved June 7, 2000.

testing of ceramics; the EU has banned certain chemicals used to manufacture toys.[66]

Services[67]

Industry and Trade

In 1997, the services sector generated a gross product of $5 trillion in the United States, growing at an average annual rate of 6 percent during 1994-97. The services sector accounted for 68 percent of total GDP in 1997. Banking and securities, insurance, and telecommunication services make up a large portion of the services sector. In 1997, banking and securities generated a gross product of $438.7 billion, insurance generated $196.6 billion, and telecommunication services totaled $158.6 billion. Together, these industries represent 10 percent of total GDP and 14 percent of services GDP.[68] The U.S. services sector employed 77 million workers in 1997. Of that amount, the banking and securities, insurance, and telecommunication industries accounted for 8 percent or 6.4 million employees.[69] That same year, U.S. firms in this sector held a total direct investment position of $50.4 billion in Mexico and Canada, compared to $100.4 billion in the UK. U.S. firms' direct investment was the largest in the finance, insurance, and real estate (FIRE) industries, with a total direct investment position of $23.8 billion in North America, and $60.7 billion in the UK in 1998. In 1998, Canadian- and Mexican-owned firms held a combined direct investment position in the U.S. services sector of $49.2 billion, whereas UK-owned firms' direct investment position in the United States stood at $61 billion. For the insurance industry, investment from Canada and Mexico combined was $7.8 billion in 1998,[70] compared with $14.3 billion

[66] These barriers are described in greater detail in appendix D, tables D-46 through D-50. Sources of nontariff barrier information are given in tables D-46, D-47, and D-49.

[67] Services encompass wholesale trade (SIC 50-51), retail trade (SIC 52-59), finance, insurance and real estate (SIC 60-67), and services (SIC 70-88).

[68] U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, Nov. 1998, pp. 34-35.

[69] U.S. Department of Commerce, Bureau of Analysis, *Survey of Current Business,* Aug. 1998, p. 80.

[70] This figure is almost exclusively due to Canadian investment.

from the UK. The direct investment position of all other Canadian- and Mexican-owned financial institutions in the United States was $9.1 billion, whereas that of the UK was only $2 billion.

U.S. service sector imports measured $165 billion during 1998. The United States supplied 62 percent of Canada's service imports and 22 percent of UK service imports in 1998 (table 3-10). During 1998, Canada and Mexico supplied the United States with 15 percent of its service imports, slightly more than the 14 percent supplied by the UK.

In 1999, the Canadian services sector generated a gross product of $336 billion, growing at an average annual rate of 3 percent during 1995-99.[71] The services sector accounted for 67 percent of total GDP in 1999. Banking and securities, insurance, and telecommunication services make up a large portion of the services sector, with the FIRE industries generating gross product of $81 billion, and telecommunication services industry generating $18 billion. Together, these industries represent 20 percent of total GDP and 30 percent of services GDP. For the same year, Statistics Canada reported 10.7 million employees in the services sector, up 2 percent for the period.[72] U.S. service firms held a total direct investment position of $32.6 billion in Canada in 1997, $22.1 billion of which was in the Canadian FIRE industries that year.[73]

In 1999, the Mexican services sector generated a gross product of $327 billion, growing at an average annual rate of 22 percent during 1997-99. Services accounted for 67 percent of Mexican GDP in 1999. The FIRE industries generated a gross product of $59.9 billion in 1999, contributing 12 percent to total GDP and 18 percent to total services GDP.[74] The direct investment position of U.S.-owned service firms in Mexico was $6 billion in 1997. In that year, U.S. investors' direct investment position was $3.6 billion in the Mexi-

[71] Data denominated in Canadian dollars were converted to U.S. dollars using the average 1999 exchange rate of .673 U.S. dollars per Canadian dollar. International Monetary Fund, *International Financial Statistics*, Mar. 2000.

[72] U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business,* Aug. 1998, p. 80.

[73] Separate numbers for the insurance industry are not available from BEA for outbound investment.

[74] Quarterly Gross Domestic Product at Current Prices by Major Division, *Instituto Nacional de Estadistica, Geographia e Informatica*, found at Internet address *http://dgcnesyp.inegi.gob.mx/pubcoy/short-term/acteco/pibntdi.html*, retrieved Apr. 12, 2000. Data reported in Mexican pesos were converted to U.S. dollars using the average 1999 exchange rate of .105 dollars per peso. International Monetary Fund, *International Financial Statistics*, Mar. 2000. Recent employment data for the FIRE sector are unavailable.

Table 3-10
Services: Trade for Canada, the UK, and the United States, 1994-98[1]

(Million dollars)

Importer	Exporter	1994	1995	1996	1997	1998
Canada	Mexico	335	334	381	462	n/a
	UK	2,245	2,261	2,361	2,466	2,366
	United States	19,708	20,600	22,561	22,986	21,976
	Rest of world	10,235	10,274	10,322	11,115	n/a
	World	32,523	33,469	35,625	37,029	35,629
UK	Canada	1,241	1,206	1,048	1,433	1,557
	Mexico	83	87	130	237	306
	United States	10,925	13,056	15,269	15,851	17,468
	Rest of world	44,408	48,431	52,272	56,387	61,399
	World	56,637	62,780	68,719	73,908	80,730
United States	Canada	10,132	11,160	12,451	13,576	15,065
	Mexico	7,849	7,930	8,918	10,023	10,007
	UK	14,692	16,063	16,186	21,552	22,779
	Rest of world	86,271	93,620	99,526	107,296	117,470
	World	119,101	128,781	137,081	152,447	165,321

[1] Comparable data for Mexico are not available.

Source: UK, Office of National Statistics, Balance of Payments Division: Statistics Canada, *Canada's International Transactions in Services*, Catalog No. 67001, First Quarter 1999, p. 21; and U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, Oct. 1999. p. 67.

can FIRE industries, of which U.S.-owned banking institutions in Mexico contributed $462 million.[75]

In 1999, the UK services sector generated a gross product of $307 billion, growing at an average annual rate of 5 percent during 1996-99, and accounting for 70 percent of total GDP in 1999.[76] The UK services sector employed 19.8 million workers in 1999, an average annual increase of 2 percent during 1995-99.[77] The banking, securities, and insurance industries are the largest segment of the sector, accounting for $31 billion in 1999, or 10 percent, of services value added. The banking, finance, and insurance industries employed 4.2 million workers in 1999, growing at an average annual rate of 4 percent during 1995-99.[78] The telecommunication services industry is the second largest segment of the sector, accounting for $17 billion, or 6 percent, of services value added in 1998. The telecommunication services industry employed just over 168,000 workers in 1997.[79] During 1990 to 1996, the number of telecommunication services employees decreased by 35 percent.[80] British investment in the U.S. FIRE industries totaled $18.0 billion in 1998, contrasting with U.S. direct investment position in the UK FIRE industries of $65.8 billion.[81] Foreign investment in the British telecommunication services industry totaled $10 billion in 1997.[82]

Barriers to Trade

A large number of measures affect a variety of service industries in each of the four countries. The most significant barriers are in the banking and securities, insurance, and telecommunication service industries. Barriers in these areas have economywide effects as these industries constitute integral components of the commercial infrastructure.

[75] U. S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business,* Sept. 1999 and Sept. 1997.

[76] Office for National Statistics, *Quarterly National Accounts*, ONS (2000) 114, Mar. 27, 2000; and Organization for Economic Cooperation and Development," GDP and value added data were estimated by USITC staff using ONS data.

[77] ONS staff, email response to USITC staff questions, May 17, 2000.

[78] ONS staff, email response to USITC staff questions, May 17, 2000.

[79] Organization of Economic Cooperation and Development (OECD), *Communications Outlook, 1999*, OECD, 1999, p. 208.

[80] Organization of Economic Cooperation and Development (OECD), *Communications Outlook, 1999*, OECD, 1999, p. 213.

[81] Separate numbers for the insurance industry are not available from BEA for outbound investment. U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business,* Sept. 1999 and Sept. 1997.

[82] Organization of Economic Cooperation and Development (OECD), *Communications Outlook, 1999*, OECD, 1999, p. 80.

The UK imposes market access and national treatment restrictions on accounting, architectural, audiovisual, banking and securities, distribution (retailing, wholesaling, and franchising), education, health, insurance, rental and leasing, telecommunication, and transport services.[83] The UK does not impose restrictions on banking activities of foreign institutions. However, there are trade and investment regulations applicable to the securities sector, affecting registration and establishment of investment companies. Foreign insurance firms must obtain authorization to operate in the UK. The European Union imposes reciprocity requirements on foreign investors in the insurance industry, which have so far not affected U.S. insurers. In its December 1998 report, the European Commission noted that substantial telecommunication interconnection disputes have been reported in the UK. The UK Government holds one special share in the UK telephone company Cable & Wireless, making it necessary to obtain official authorization before foreign persons may acquire stakes in the firm. The UK Government also maintains requirements for certain senior executive and nonexecutive posts at Cable & Wireless.

Canada imposes market access and national treatment restrictions on accounting; architectural, engineering, and construction (AEC); audiovisual; banking and securities; franchising; insurance; legal; energy; telecommunication; and travel and tourism services.[84] Investment impediments in the Canadian banking and securities sector include restrictions on acquiring equity in financial institutions. Trade impediments in the Canadian banking and securities sector include value-added taxes assessed on imported supplies, registration requirements of nonresident dealers and brokers, and residency requirements for the provision of mutual fund activities. There are a number of impediments in the Canadian insurance sector. A commercial presence is required for most types of insurance provided by non-North American investors in Canada; branches of foreign companies must maintain assets equivalent to their liabilities; and at least half of the company's directors must be Canadian citizens or residents. In addition, a 10-percent excise tax is imposed on insurance business with nonresident insurers and primary insurers in Canada must purchase at least 25 percent of their reinsurance from Canadian firms. Canada limits foreign investment in facilities-based telecommunication carriers to 46.7 percent of voting shares and maintains minimum citizenship requirements for the board of directors.

[83] These barriers are described in greater detail, with the sources of barriers information in appendix D, table D-50.

[84] These barriers are described in greater detail with the sources of barriers information in appendix D, table D-51.

Mexico imposes market access and national treatment restrictions on accounting, advertising, AEC, audiovisual, banking and securities, computer, courier, education, energy, health, insurance, legal, rental and leasing, retail, telecommunication, transport, travel and tourism, wholesale, and other miscellaneous services.[85] Some of the most significant barriers are in financial services. For example, Mexico limits foreign ownership of banking and securities firms. Mexico requires prior authorization to establish a commercial presence and prohibits foreign establishment of credit unions, savings and loans, and development banks. Non-North American foreign investors are limited to minority ownership shares in insurance companies and foreign government representatives are not permitted to invest in Mexican insurance companies. Foreign reinsurance companies must be registered with the Mexican Government, and authorization to register is not guaranteed.

Telecommunications services are subject to restrictions in Mexico. Foreign investment in facilities-based telecommunication carriers is limited to 49 percent, although the limit may be exceeded for cellular communication services, provided that the investor receives permission from the Foreign Investment Commission. Additionally, resellers may not be owned by public telecommunication firms or foreign governments. Cross-border provision of telecommunication services must be routed through the facilities of an enterprise that has received an operating concession from the Ministry of Communications and Transport. With respect to satellite technology, Telecomunicaciones de Mexico (Telecomm) retains exclusive rights to links with Intelsat and Inmarsat and providers of domestic long-distance satellite services must use the Mexican satellite infrastructure until 2002.

The United States imposes market access and national treatment restrictions on accounting, audiovisual, banking and securities, customs house brokerage, education, health, insurance, legal, retail, telecommunication, travel and tourism, and wholesale services.[86] The most significant barriers for foreign financial service providers in the United States include investment restrictions, such as commercial establishment limitations and/or citizenship requirements pertaining to depository institutions organized under state law. EU firms identify limitations on the types and forms of affiliations permitted in the United States as key impediments. In the insurance industry, foreign providers face restrictions on forms of insurance and may not offer surety bonds for U.S. Government contracts. Recent financial modernization legislation is expected to remove barriers to entry for foreign firms that incorporate combined banking and insurance subsidiaries, a combination that was previously prohibited in the United States under the Glass-Steagall Act.

The United States restricts foreign access to satellite-based telecommunication services and does not accord foreign firms market access and national treatment in the U.S. markets for Direct to Home, Direct Broadcast Satellite, and satellite-based digital audio services. Foreign individuals, governments, or corporations are prohibited from holding common carrier radio licenses and foreign direct investment in firms holding common carrier radio licenses is limited to 20 percent of equity, although there are no restrictions on indirect investment. In essence, this requires foreign firms to establish U.S. holding companies prior to the establishment or acquisition of a telecommunications carrier in the U.S. market.

Effects of Trade Barriers on Consumer Choice

Trade barriers, by increasing the final price of imported goods to consumers or limiting their availability in other ways, can directly inhibit consumer choice and reduce consumer welfare. Measures of the welfare cost of trade barriers include estimates of changes in overall price levels, or in the price levels for various aggregate commodity groups such as those derived in the next chapter. However, because these estimates are applied to highly aggregated goods, as affected by the average trade barriers for those aggregates, some of the consumer benefits arising from the elimination of these barriers are missed. For example, the next chapter describes estimates of the effect on the U.S. economy of eliminating U.S. barriers to imports of processed foods equivalent to an overall tariff rate of 3 to 4 percent. However, within that average are duties on dairy products which can reach as high as 25 percent, and on fish which can be up to 35 percent. Within specific commodity groups the existence of peak tariffs and particular nontariff barriers can lead consumers to substitute other similar (but perhaps less desirable) goods for the products subject to these barriers. If it were feasible to measure the effects of the elimination of these specific peak barriers, one would most likely find a measurable effect on consumer prices. One would also likely find an increase in the consumption of a variety of imported goods, and perhaps domestic

[85] These barriers are described in greater detail, with sources of barrier information in appendix D, table D-52.

[86] These barriers are described in greater detail, with the sources of barrier information in appendix D, table D-53.

goods as well. Further, although most quantitative economic models are not capable of measuring increased trade in products that are not currently traded at all, it is likely that for some goods, peak barriers serve to bar imports completely; elimination of such barriers would have distinct but likely small effects on consumer choice. The value of these effects would depend on the magnitude of the specific trade barriers, and on the existence and nature of domestic substitutes.

While it has not been feasible within the scope of this study to quantitatively analyze such substitution effects in their entirety, the enumeration of trade barriers in the preceding sections of this chapter does indicate many areas in which one could expect to find them. Barriers that most directly serve to limit consumer choices are those in areas typified by a great variety of products that are near but not perfect substitutes. By extension, the elimination of these barriers would then be expected to afford increased opportunities for consumers to choose among competing products at competitive prices.

Among fibers, textiles, and apparel, there are many high U.S. tariffs that presently act as a bar to consumer choice. Tableware, kitchenware, and glass products (including those for hotel and restaurant use) represents another class of products for which lower transatlantic trade barriers could be expected to open the range of options available to consumers. Many food products, such as cheeses and confections, are subject to tariff and nontariff barriers. Niche markets in chemicals, cosmetics, plastics, and luggage also represent opportunities for wider choice.

Chapter 4 provides estimates of the changes in trade patterns due to the elimination of trade barriers under the contemplated free trade arrangement. In part, the increased trade found to occur is due to the availability of imported goods at reduced prices, and the imported goods are assumed to be close but imperfect substitutes for domestic products. In other words, increased imports represent the increased consumption of a wider variety of products. The analysis in that chapter is conducted at a high level of aggregation, however, so it does not address specific issues or instances of the effects of broader consumer choice.

CHAPTER 4
Elimination of Existing Trade Barriers

This chapter investigates the possible economic effects on the United States and on the UK of the elimination of the existing trade barriers between the United States, Canada, and Mexico on the one hand, and the UK on the other hand. Two types of analytical techniques are used.

The first part of the chapter uses a multicountry, multisector, computable general equilibrium model (CGE)–the Global Trade Analysis Project (GTAP) model–and its corresponding database to study the effects of the potential FTA on a number of economic aggregates. These include the volume of trade in goods and services between the United States and the UK, the gross domestic product of each country, the employment across industry sectors, the balance of payments of each country, and the final prices paid by consumers in each country.

Because bilateral investment effects are not explicitly treated in the GTAP model, a separate analysis of the effects of the removal of trade barriers on direct investment was performed. A partial equilibrium model was specifically developed by Commission staff to study the response of multinational firms to changes in trade policies. The second part of the chapter presents this model and addresses the potential effects of the contemplated FTA on the amount of foreign direct investment between the United States and the UK.

General Equilibrium Analysis

The GTAP modeling framework consists of a static computable general equilibrium model and a global database on international trade, country and regional interindustry relationships, and national income accounts.[1] It allows for comparisons of the global economy in two environments–one in which the base values of policy instruments (such as tariffs or export restrictions) are unchanged, and another in which these measures are changed or shocked, to reflect the policies that are being studied. A change in policy makes itself felt throughout the countries and regions depicted in the model. It should be stressed that the model says nothing about the speed with which changes occur, what has happened to various dimensions of the economies in the meanwhile, or what may have happened to change some of the underlying dynamic structures of the economies, such as specific patterns of foreign direct investment or technological changes that may alter the future growth pattern of economies.

GTAP Database and Aggregation Strategy

The GTAP database divides the world into 45 countries (or regions) and has 50 commodity aggregates (or sectors) and five primary factors of production. In addition to the data on trade in each of the commodities between each pair of countries or regions in the model, there are data on the domestic production and use of each commodity, including use in the production of other commodities; the supply and use of land, labor, and capital; population, and GDP. The database also contains information on tariffs, some nontariff barriers,[2] and other taxes. An additional component of the data is a set of parameters which, in the context of the model's equations, determines its behavior.[3]

For the purpose of this analysis, the database has been aggregated into six regions and 10 commodity groups (table 4-1).

[1] More discussion of the GTAP framework is presented in appendix E. For further information, see T.M. Hertel (ed.), *Global Trade Analysis: Modeling and Application*. (Cambridge: Cambridge University Press), 1997.

[2] GTAP protection data are limited to tariffs and, to a smaller extent, partial quantifications of nontariff barriers associated with agricultural products.

[3] In a series of sensitivity analyses, the Commission confirmed the robustness of the results reported here by testing for reasonable variations in these parameters such as substitution, price, and income elasticities.

Table 4-1
Commodity and regional aggregation

Commodity aggregation	Regional aggregation
Agriculture	Canada
Mining	Mexico
Processed food	United States
Textiles and apparel	UK
Iron and steel	Rest of the EU
Machinery and equipment	Rest of the world
Transport equipment	
Chemical, rubber, and plastic	
Other manufactures	
Services[1]	

[1] The GTAP database contains only a limited and highly aggregated representation for the services sector. Unlike the other sectors in the database, services are not fully tradable and the border measurers captured in the GTAP protection data do not fully represent the actual restrictions to trade in services.

Source: GTAP database.

The standard GTAP database (Version 4) is based on 1995 measures, including trade flows, trade barriers, population, and other data. For the present study, the standard data set was modified to reflect an environment in which all policy measures ratified under NAFTA, the Uruguay Round, the Information Technology Agreement (ITA) and the recent EU-Mexico Free Trade Arrangement are completely implemented.[4] This updated data set is used as the base data for the current analysis. Thus, all results reported here should be interpreted as if the contemplated FTA took place in 1995, all its effects were felt immediately, and the Uruguay Round, the NAFTA, the ITA, and the EU-Mexico FTA had already been fully implemented.

Table 4-2 reports the percentage ad-valorem import duties between the four countries participating in the contemplated FTA, as reflected in the GTAP database adjusted in the way described above. These duties do not exist for trade among the three NAFTA members nor between Mexico and the UK. For the United States, the highest incidence of trade barrier imposed on imports from the UK occurs in the textile sector (7.9 percent). In the UK, the United States and Canada face relatively high protection rates in the agriculture and processed food sectors. In fact, the UK imposes duties of 18 percent ad valorem on agricultural imports from the United States and 30 percent on imports of processed foods from Canada.

Table 4-3 reports the value of bilateral trade flows among the six regional aggregates as reflected in the adjusted GTAP database. In the model, about 14 percent of UK imports come from the United States (compared to 52 percent coming from the EU) while 5 percent of U.S. imports originate in the UK. Similarly, 13 percent of UK exports go to the United States (compared to 50 percent going to the EU), while 5 percent of U.S. exports go to the UK.[5]

Bilateral sectoral exports between the UK and the United States are reported in table 4-4. The modified database suggests substantial levels of intraindustry trade between the two countries. For most sectors, the model shows a high level of two-way trade between the UK and the United States. Both countries at the same time export and import products that are relatively similar in input requirements and are highly substitutable in use. The service industry accounts for about 35 percent of UK exports to the United States and U.S. exports to the UK. Machinery accounts for 25 percent of UK exports to the United States, and 35 percent of U.S. exports to the UK.

Simulation Design

The request letter from the Senate Finance Committee asked the Commission to report the impact on the United States and the UK of the contemplated FTA on a number of economic aggregates, including the volume of trade in goods and services between the two countries and, for each country, the gross domestic product, employment across industry sectors, balance of payments, and the final prices paid by consumers.

The first step is to determine the policy experiments that would reflect the formation of the hypothetical trade arrangement. The analysis presented next is of a comparative static nature, and it addresses the following question: if such an FTA were

[4] The nature of these adjustments is addressed in Appendix E.

[5] Due to different base years and other adjustments, direct comparisons between these figures and those reported in Chapter 2 should not be made. However, they are broadly similar.

Table 4-2
Modified GTAP import duties

(Percent ad valorem rate)

Source	Destination and commodity				Destination and commodity			
	Canada	Mexico	United States	UK	Canada	Mexico	United States	UK
	Agriculture				*Machinery and equipment*			
Canada	0	0	0	5.0	0	0	0	4.4
Mexico	0	0	0	0	0	0	0	0
United States	0	0	0	17.8	0	0	0	3.5
UK	0.1	0	1.6	0	4.5	0	1.4	0
	Mining				*Transportation equipment*			
Canada	0	0	0	0.1	0	0	0	3
Mexico	0	0	0	0	0	0	0	0
United States	0	0	0	1	0	0	0	2.5
UK	0.9	0	1.1	0	3.4	0	2.4	0
	Processed food				*Chemical, rubber, and plastic*			
Canada	0	0	0	28.9	0	0	0	2
Mexico	0	0	0	0	0	0	0	0
United States	0	0	0	10.1	0	0	0	3.9
UK	4.4	0	3.6	0	4.5	0	2.7	0
	Textiles and apparel				*Other manufactures*			
Canada	0	0	0	6	0	0	0	1.5
Mexico	0	0	0	0	0	0	0	0
United States	0	0	0	5.8	0	0	0	1.7
UK	12.7	0	7.9	0	3.6	0	1.4	0
	Iron and steel				*Services*			
Canada	0	0	0	0.8	0	0	0	0
Mexico	0	0	0	0	0	0	0	0
United States	0	0	0	1.9	0	0	0	0
UK	5.4	0	2.9	0	0	0	0	0

Source: GTAP database and USITC Staff calculations.

Table 4-3
Total value of imports, 1995 GTAP

Destination

Source	Canada	Mexico	United States	UK	EU	Rest of world	Total
	Value *(million dollars)*						
Canada	-	915	147,181	3,513	11,362	36,500	199,470
Mexico	2,881	-	62,536	610	5,144	12,985	84,155
United States	118,438	45,782	-	40,170	154,141	350,760	709,292
UK	4,185	832	38,246	-	141,153	94,915	279,332
EU	13,600	10,838	150,900	155,289	1,050,153	612,882	1,993,662
Rest of the world	33,970	10,690	447,506	98,124	541,305	1,322,670	2,454,265
Total	173,075	69,057	846,369	297,705	1,903,257	2,430,713	5,720,175
	Percent of total						
Canada	-	1.3	17.4	1.2	0.6	1.5	3.5
Mexico	1.7	-	7.4	0.2	0.3	0.5	1.5
United States	68.4	66.3	-	13.5	8.1	14.4	12.4
UK	2.4	1.2	4.5	-	7.4	3.9	4.9
EU	7.9	15.7	17.8	52.2	55.2	25.2	34.9
Rest of the world	19.6	15.5	52.9	33.0	28.4	54.4	42.9
Total	100	100	100	100	100	100	100

Source: GTAP database and USITC staff calculations.

Table 4-4
Sectoral trade flows between the UK and the United States

Commodity	From UK to United States		From United States to UK	
	Value	Percent of total	Value	Percent of total
	Million dollars		*Million dollars*	
Agriculture	102	0.27	580	1.44
Mining	3,290	8.60	717	1.79
Processed food	990	2.59	517	1.29
Textiles and apparel	571	1.49	639	1.59
Iron and steel	1,297	3.39	1,574	3.92
Machinery and equipment	9,532	24.92	13,982	34.81
Transportation equipment	2,776	7.26	2,543	6.33
Chemical, rubber, and plastic	3,678	9.62	2,712	6.75
Other manufactures	2,120	5.54	2,821	7.02
Services	13,890	36.32	14,085	35.06
Total	38,246	100	40,170	100

Source: GTAP database and USITC staff calculations.

established between the UK and the NAFTA countries, how would trade and other relevant variables differ compared to the base case?

In the current study, it is assumed that the contemplated trade arrangement between the UK and its North American trading partners would follow a pattern similar to that established by NAFTA. Among other things, the analysis eliminates tariffs and some nontariff barriers between the UK and the North American countries. A quantitative assessment of the effects of removing most nontariff barriers was not feasible, due to the number of such barriers, their generally small areas of applicability, and the complexity associated with quantifying them for use in mathematical models.

For simplicity, the analysis assumes that all trade barriers will be eliminated at once, with no gradual phase-in provisions. The GTAP model addresses rules of origin by implicitly assuming that one country's imports are not re-exported to another one.

While modeling the formation of the FTA itself is a relatively straightforward task, the main challenge in this analysis is to determine the trading relationship that would prevail between the UK and the EU following the agreement. This is particularly relevant because the UK is a member of the EU and as such, it has very limited competence to deviate unilaterally from the EU's common external trade policies. As noted earlier, possible outcomes could range from a complete retention of the current relationship between the UK and the EU to a complete withdrawal of the UK from the EU, with perhaps the most plausible outcome lying somewhere within the broad, middle range in the form of some modified trade relationship between the UK and the EU. The experiments conducted here are designed to study the effects of forming a trade arrangement between the NAFTA members and the UK under two different scenarios. Although these two scenarios may seem extreme, they do provide lower- and upper-bound cases for the range of possible relationships that might prevail between the UK and the EU after the establishment of a FTA between the UK and the members of NAFTA.

The first scenario (experiment 1) assumes that the UK will be able to form a free trade arrangement with the NAFTA members while keeping intact all essential features of its membership in the EU. This scenario reflects a simple interpretation of the analysis requested by the Senate Finance Committee. In this case, the UK continues to be a member of the EU but is granted an exceptional authorization to deviate from the EU's common external tariffs. The simulation here is simply the complete removal of import tariffs and tariff equivalents of some bilateral nontariff barriers between the UK and each of the three NAFTA members.

The second scenario (experiment 2) reflects the notion that the current structure of the EU does not allow members to form such agreements on their own behalf. Instead, the UK severs its relationship with the EU. The UK's subsequent trade relationships with the world (other than the NAFTA member countries, and the rest of the EU) would be the same as the one it now enjoys as a member of the EU. In the case of NAFTA countries, of course, trade barriers are eliminated and in the case of the EU, barriers are raised to the level of the EU's common external tariff. In modeling the shocks, this case is similar to the first one, except that in addition to the preferential trade liberalization

between the UK and each of the three NAFTA members, the UK and the EU would stop granting preferential access to each others' products. The new import barriers erected in both directions between the UK and the EU are assumed to be the EU's common external tariff imposed on the rest of the world.

For each of these two experiments, the simulated effects of the hypothetical trade arrangement on the volume of trade of the United States and of the UK, and each country's gross domestic product, employment across industry sectors, balance of payments, and the final prices paid by consumers are presented and discussed in the remainder of this section.

Simulation Results

Experiment 1. UK-North American Free Trade Arrangement

In this first policy experiment, the UK forms a free trade arrangement with the members of NAFTA while remaining a member of the EU. The absence of trade barriers between the UK and the EU raises questions regarding the contemplated FTA's rules of origin. The exact nature of the rules of origin cannot be predicted, and even if the NAFTA's rules were used, their impact on trade cannot be clearly identified. It must be noted, however, that the GTAP model implicitly assumes that there is no re-exportation–that is, U.S. exports into the UK are not re-exported duty-free into the EU, and EU exports to the UK are not re-exported to the United States.

Trade volume in goods and services

The estimated general equilibrium effects of experiment 1 indicate that total U.S. exports increase by $1.9 billion (0.24 percent) following the contemplated FTA. Due to the UK preferential trade liberalization, there is a clear redirection of U.S. trade flows towards the UK, and away from other trading partners. In fact, U.S. exports to the UK increase by $5.1 billion (12.8 percent), while exports to all other regions including Canada and Mexico decline. U.S. exports to the EU decline by $751 million (0.49 percent).

Total U.S. imports increase by $2.9 billion (0.32 percent). Most of this increase is accounted for by its imports from the UK which increase by $2.8 billion (7.3 percent). U.S. imports from Canada drop by $369.8 million (0.25 percent) and from Mexico by $8 million (0.01 percent). U.S. imports from the EU slightly increase by $231 million. The effects on Mexico are small because it already enjoys free access to the UK market under the EU-Mexico FTA.

The directions of these changes are consistent at the sectoral level (tables 4-5 and 4-6). For most sectors, U.S. exports to the UK increase substantially and those to the other regions drop slightly-by less than 1 percent. Agricultural exports to the UK increase by more than 100 percent, while processed food exports increase by 54 percent. Because these two sectors are among the most protected ones in the UK as well as in the EU, their liberalization leads to a large supply response from the North American countries.

U.S. sectoral imports from the UK also increase substantially, with the exception of the services sector, which experiences a drop of $115 million. For all sectors, total U.S. imports experience sharp increases, which are mainly driven by the increased imports from the UK.

On the UK side, the contemplated arrangement increases total UK exports by $1.7 billion (0.57 percent). In contrast, total EU exports increase by a mere $11 million. UK exports to the United States increase by $2.8 billion (7.3 percent), while those to the EU decrease by $1 billion (0.76 percent). With the exception of trade in services, UK sectoral exports experience large increases for Canada and the United States but small drops for other regions. UK exports of textile products to Canada increase by 116 percent or $100 million and the United States by 63 percent or $361.3 million (tables 4-7 and 4-8).

Total UK imports increase substantially by more than $3 billion (0.94 percent). UK imports from Canada and from the United States expand by $638 million (18.2 percent) and by $5.1 billion (12.8 percent), respectively, whereas imports from other regions drop by $2.7 billion. UK imports from the EU, in particular, drop by $1.7 billion (1.1 percent). UK imports of processed food products from Canada increase by 224 percent ($302 million) and imports of agricultural products from the United States increase by 103 percent ($598.6 million). Machinery imports from the United States experience the sharpest increase in absolute terms, expanding by $2.4 billion (18 percent). Total EU imports decrease by $1 billion, which is due mainly to the drop in imports originating from the UK.

Bilateral trade balances, defined as exports minus imports, decrease in the United States by $396.6 million (0.23 percent) and the UK by $974 million (3.9 percent) (table 4-9). These figures imply that for both countries, overall import expansion exceeds the increase in exports. U.S. trade balances in the agriculture, processed food, and machinery sectors increase, driven mainly by the export expansion towards

Table 4-5
Changes in U.S. exports, by commodities, experiment 1

Commodity	Canada	Mexico	UK	EU	Rest of world	Total
			Value *(million dollars)*			
Agriculture	-4.09	-8.11	598.58	-46.82	-187.29	352.27
Mining	-12.14	-3.79	38.07	-11.26	-28.7	-17.82
Processed food	-13.9	-4.51	277.27	-13.59	-85.23	160.04
Textiles and apparel	-34.63	-7.15	274.61	-11.87	-49.49	171.47
Iron and steel	-55.18	-9.19	164	-15.4	-51.77	32.46
Machinery and equipment	-211.29	-41.57	2448.97	-209.17	-546.15	1440.79
Transportation equipment	-174.34	-19.66	680.76	-105.56	-257.42	123.78
Chemical, rubber, and plastic	-69.55	-9.52	393.34	-44.45	-108.2	161.62
Other manufactures	-36.76	-10.72	238.9	-40.48	-110.29	40.65
Services	-22.85	-16.53	23.01	-252.65	-262.48	-531.5
Total	-634.73	-130.75	5137.51	-751.25	-1687.02	1933.76
			Percent			
Agriculture	-0.14	-0.36	103.21	-0.79	-0.61	0.83
Mining	-0.43	-0.25	5.31	-0.29	-0.35	-0.10
Processed food	-0.38	-0.33	53.65	-0.58	-0.50	0.64
Textiles and apparel	-1.59	-0.33	42.95	-0.61	-0.58	1.11
Iron and steel	-0.76	-0.28	10.42	-0.48	-0.46	0.12
Machinery and equipment	-0.61	-0.25	17.52	-0.52	-0.48	0.65
Transportation equipment	-0.66	-0.57	26.77	-0.93	-0.84	0.17
Chemical, rubber, and plastic	-0.57	-0.17	14.50	-0.32	-0.30	0.23
Other manufactures	-0.42	-0.29	8.47	-0.55	-0.50	0.09
Services	-0.13	-0.29	0.16	-0.40	-0.37	-0.31
Total	-0.54	-0.29	12.79	-0.49	-0.48	0.27

Source: GTAP database and USITC staff calculations.

UK markets with relatively high tariff barriers. In contrast, the EU's trade balance increases by $584 million: its trade balance with the United Stated increases by $982 million while its trade balance with the UK decreases by $648 million.

Gross domestic product and industrial employment

The effects of the contemplated FTA on each country's GDP are virtually zero (table 4-10).[6] The UK's GDP increases by one tenth of 1 percent, or $100 million. U.S. GDP increases by $55 million, while the GDP for the EU drops by $1 million and for Canada it drops by $42 million.

Changes in domestic production are also small in percentage terms (table 4-11). For the United States, the FTA expands production in the agriculture, processed foods, and machinery sectors. Exports to the UK increase the most in the machinery sector, which expands by $911 million (0.11 percent).

The remaining sectors experience very slight contractions. The transportation industry experiences the largest impact in both absolute and percentage terms, with output declining by $459 million (0.08 percent). This drop seems to be driven mainly by a $755 million increase in UK exports of transport equipments to the United States, which decreases incentives for (or profitability of) domestic production.

[6] The Commission staff has been unable to locate other quantitative studies of likely effects of a trade arrangement such as that envisaged here. Baldwin and Francois (*Preferential Trade Liberalization in the North Atlantic*, Centre for Economic Policy Research Discussion Paper No. 1611, March 1997) estimate effects of a variety of liberalized trade regimes, using an earlier version of the GTAP model and data. Some of their scenarios involve degrees of trade liberalization between the full EU (not just the UK) and the United States (not all of North America), and the barriers liberalized include estimated quantifications of nontariff barriers, dumping duties, and other preferential trade policies. They find somewhat larger effects on real income than are found in this study, ranging from a decrease of $0.9 billion (in 1992 dollars) to an increase of $56.7 billion. No estimates are provided of costs or benefits to the UK (separately from the EU) in this study, and no quantitative estimates have been found of the likely cost or benefit to the UK of leaving the EU.

Table 4-6
Changes in U.S. imports, by commodities, experiment 1

Commodity	Canada	Mexico	UK	EU	Rest of world	Total
			Value *(million dollars)*			
Agriculture	-5.04	9.37	8.2	5.6	48.86	66.99
Mining	-28.05	0.73	167.75	1.38	-0.63	141.18
Processed food	-18.19	-1.91	174.59	-1.31	-9.65	143.53
Textiles and apparel	-6.49	-7.23	361.39	-5.6	-71.55	270.52
Iron and steel	-32.76	-3.16	209.53	3.25	-0.26	176.6
Machinery and equipment	-36.97	-6.28	709.08	41.15	83.56	790.54
Transportation equipment	-149.39	-10.91	755.39	28.74	32.82	656.65
Chemical, rubber, and plastic	-38.88	-4.21	363.71	-21.41	-48.36	250.85
Other manufactures	-51.5	4.72	153.87	24.12	78.86	210.07
Services	-2.52	10.92	-115.08	154.91	154.37	202.6
Total	-369.79	-7.96	2788.43	230.83	268.02	2909.53
			Percent			
Agriculture	-0.15	0.32	8.07	0.55	0.46	0.37
Mining	-0.17	0.01	5.10	0.02	-0.00	0.19
Processed food	-0.46	-0.16	17.64	-0.02	-0.09	0.60
Textiles and apparel	-0.32	-0.22	63.25	-0.14	-0.21	0.61
Iron and steel	-0.27	-0.10	16.16	0.04	-0.00	0.39
Machinery and equipment	-0.16	-0.03	7.44	0.11	0.05	0.31
Transportation equipment	-0.35	-0.10	27.21	0.19	0.09	0.59
Chemical, rubber, and plastic	-0.34	-0.23	9.89	-0.15	-0.18	0.44
Other manufactures	-0.22	0.12	7.26	0.23	0.17	0.24
Services	-0.03	0.30	-0.83	0.33	0.28	0.16
Total	-0.25	-0.01	7.29	0.15	0.06	0.34

Source: GTAP database and USITC staff calculations.

In the UK, the FTA expands production in the textiles, iron and steel, machinery, transportation, and chemical sectors and shrinks the remaining sectors. The transport sector in particular expands by $582 million (1.11 percent), most of which is exported to the United States and Canada. Agriculture shrinks by $341 million (0.71 percent) due to increased imports and competition from Canada and the United States.

Sectoral output changes in other regions are also small in percentage terms. In the EU, the machinery and equipment sector's output is the most affected, declining by $540 million (0.06 percent). This decline is the result of the drop in that sector's exports to the UK.

These effects are reflected in small changes in the demand for labor in the United States and the UK (table 4-12). The impact of the FTA is almost identical for skilled and unskilled labor in both countries. Just as in the changes in sectoral output, sectoral demand for labor in the United States increases in agriculture, processed food and machinery, and decreases in other sectors. In the UK, labor demand increases in the textiles, iron and steel, machinery, transportation, and chemical sectors and declines in the remaining sectors.

Table 4-13 reports the changes in the real rate of return to (i.e., the payment made to the owner of) the different primary factors of production. In general, an output expansion in a particular sector will increase the returns to the factors that are intensively used in that sector. Real wages for both unskilled and skilled labor increase in both United States and the UK, although the increase is larger in the UK. The rental rate on land drops by almost 3 percent in the UK, as the agricultural sector is opened up to Canadian and U.S. imports. The returns to natural resources (used mainly in mining) decline as the mining sector's output declines in both countries. In the EU, returns to factors of production (with the exception of natural resources) experienced very slight declines.

Table 4-7
Changes in UK exports, by commodities, experiment 1

Commodity	Canada	Mexico	US	EU	Rest of world	Total
			Value *(million dollars)*			
Agriculture	0.51	0.02	8.2	3.41	4.73	16.87
Mining	16.82	-0.21	167.75	-125.96	-49.23	9.17
Processed food	35.35	-0.09	174.59	-26.08	-18.25	165.52
Textiles and apparel	100.85	-0.07	361.39	-43.71	-24.32	394.14
Iron and steel	85.46	-0.3	209.53	-96.82	-46.82	151.05
Machinery and equipment	269.29	-0.98	709.08	-235.62	-148.87	592.9
Transportation equipment	121.48	-0.66	755.39	-142.56	-54.28	679.37
Chemical, rubber, and plastic	94.74	-0.49	363.71	-105.46	-47.73	304.77
Other manufactures	42.27	-0.33	153.87	-84.34	-50.4	61.07
Services	-9.18	-1.04	-115.08	-209.32	-277.94	-612.56
Total	757.59	-4.15	2788.43	-1066.46	-713.11	1762.3
			Percent			
Agriculture	1.24	0.68	8.07	0.09	0.27	0.31
Mining	3.75	-0.93	5.10	-0.98	-1.04	0.04
Processed food	22.53	-0.13	17.64	-0.37	-0.28	1.12
Textiles and apparel	116.33	-0.56	63.25	-0.82	-0.80	4.37
Iron and steel	32.44	-0.74	16.16	-0.95	-0.93	0.90
Machinery and equipment	26.88	-0.35	7.44	-0.61	-0.57	0.79
Transportation equipment	40.74	-0.60	27.21	-0.97	-0.87	2.81
Chemical, rubber, and plastic	17.32	-0.34	9.89	-0.50	-0.49	0.86
Other manufactures	20.82	-0.77	7.26	-1.02	-0.98	0.39
Services	-0.81	-0.96	-0.83	-1.07	-1.04	-1.00
Total	18.10	-0.50	7.29	-0.76	-0.75	0.63

Source: GTAP database and USITC staff calculations.

Final prices paid by consumers

Table 4-14 reports the changes in the domestic market price in each sector. The price changes triggered by the FTA in both the United States and the UK are positive but very small (ranging from 0.03 to 0.25 percent). These price changes are related to the increases in the payment made to the factors of production, as well as the general increase in income levels in both countries. The only exception is the small decline in agricultural prices in the UK, which is triggered by lowering of relatively high tariffs in the UK agricultural sector to foreign competition. In contrast, sectoral price levels experience small drops in the EU.

Experiment 2. UK-North American Free Trade Arrangement with EU Withdrawal

The second scenario assumes that the UK completely withdraws from the EU. The difference between this and experiment 1, then, is the new import barriers that are erected between the UK and the EU. It is assumed that these new barriers are equivalent to the EU's (and the UK) common external tariff imposed on the rest of the world.

Trade volume in goods and services

The results of the computable general equilibrium simulations of experiment 2 show that total U.S. exports increase by $2 billion (0.29 percent) following the free trade arrangement: U.S. exports to the UK increase by $7 billion (17.5 percent) while exports to the other regions decline. This export expansion is larger than that in the first experiment because in this scenario trade barriers are imposed on UK imports from the EU, which improves the competitiveness of U.S. goods in the UK market in relation to EU exports. U.S. exports to the EU decrease by $1.3 billion (0.84 percent) as exports are redirected to the UK.

Table 4-8
Changes in UK imports, by commodities, experiment 1

Commodity	Canada	Mexico	US	EU	Rest of world	Total
			Value *(million dollars)*			
Agriculture	28.02	-0.52	598.58	-145.79	-213	267.29
Mining	2.88	0.21	38.07	10.33	25.99	77.48
Processed food	302.06	-2.05	277.27	-185.29	-113.11	278.88
Textiles and apparel	21.07	-0.25	274.61	-55.45	-66.7	173.28
Iron and steel	13.39	-0.23	164	-9.25	-7.22	160.69
Machinery and equipment	167.7	-2.05	2448.97	-958.27	-610.28	1046.07
Transportation equipment	33.13	-0.11	680.76	-304.08	-60.22	349.48
Chemical, rubber, and plastic	8.78	-0.58	393.34	-141.39	-40.85	219.3
Other manufactures	59.31	-0.14	238.9	-61.45	-42.8	193.82
Services	2.03	0.54	23.01	135.83	111.79	273.2
Total	638.37	-5.18	5137.51	-1714.81	-1016.4	3039.49
			Percent			
Agriculture	19.80	-3.77	103.21	-3.57	-3.65	2.51
Mining	0.63	0.24	5.31	0.25	0.22	0.46
Processed food	223.98	-2.03	53.65	-1.87	-1.95	1.70
Textiles and apparel	45.29	-0.87	42.95	-0.78	-0.84	1.10
Iron and steel	4.14	-0.23	10.42	-0.09	-0.13	0.90
Machinery and equipment	23.65	-2.69	17.52	-2.56	-2.61	1.38
Transportation equipment	33.33	-1.59	26.77	-1.24	-1.34	1.11
Chemical, rubber, and plastic	6.90	-0.74	14.50	-0.66	-0.69	0.72
Other manufactures	7.74	-0.51	8.47	-0.40	-0.46	0.69
Services	0.29	0.62	0.16	0.65	0.60	0.50
Total	18.17	-0.85	12.79	-1.10	-1.04	1.02

Source: GTAP database and USITC staff calculations.

Table 4-9
Changes in the U.S., UK, and EU trade balances, experiment 1
(Million dollars)

Commodity	United States	UK	EU
Agriculture	347.697	-280.5	-48.028
Mining	-144.58	-35.253	98.446
Processed food	45.595	-84.942	-116.672
Textiles and apparel	-82.524	225.125	15.353
Iron and steel	-128.344	13.121	110.762
Machinery and equipment	853.882	-434.305	-406.375
Transportation equipment	-490.154	337.497	65.743
Chemical, rubber, and plastic	-52.649	112.246	-28.377
Other manufactures	-138.207	-109.239	126.216
Services	-607.356	-718.076	767.403
Total	-396.64	-974.326	584.471

Source: GTAP database and USITC staff calculations.

Table 4-10
Changes in gross domestic product, by region, experiment 1

Country	Quantity	Value
	Percent	*Million dollars*
Canada	-0.01	-42.25
Mexico	0	0.59
United States	0	55
UK	0.1	100.5
EU	0	-51
Rest of the world	0	-227

Source: GTAP database and USITC staff calculations.

Table 4-11
Changes in output, by commodities, experiment 1

Commodity	Canada	Mexico	United States	UK	EU	Rest of world
	Quantity *(percent)*					
Agriculture	0.16	0.03	0.12	-0.71	-0.02	0
Mining	-.09	.01	-.06	-.09	.03	.01
Processed food	.77	-.02	.01	-.12	-.02	-.01
Textiles and apparel	-.13	-.04	-.03	1.26	0	-.03
Iron and steel	-.16	-.02	-.04	.22	.01	0
Machinery and equipment	.21	-.02	.11	.02	-.06	-.01
Transportation equipment	-.23	-.05	-.08	1.11	.01	.02
Chemical, rubber, and plastic	-.16	-.01	-.01	.21	0	0
Other manufactures	-.05	.04	-.03	-.09	.02	.01
Services	-.01	0	0	-.03	0	0
	Value *(million dollars)*					
Agriculture	62.7	14.55	407.75	-340.87	-68.72	65.13
Mining	-53.32	5.29	-218.84	-67.63	121.84	186.5
Processed food	298	-6.64	41.75	-113.72	-124.88	-126
Textiles and apparel	-17.85	-5.87	-65.89	355.05	3.5	-210.94
Iron and steel	-66.76	-4.25	-151.13	145.44	62.44	51.5
Machinery and equipment	102.38	-6.48	911.38	32.31	-540.19	-285.25
Transportation equipment	-148.27	-11.1	-459	582.37	32.69	101.5
Chemical, rubber, and plastic	-67.73	-3.58	-60.56	182.15	1.06	2.25
Other manufactures	-41.77	9.03	-128.03	-75.27	115.38	151.88
Services	-78.5	-6.52	-327.5	-389.63	335	-50

Source: GTAP database and USITC staff calculations.

Table 4-12
Changes in demand for labor, by commodities, experiment 1

(Percent)

	United States		UK	
Commodity	**Skilled labor**	**Unskilled labor**	**Skilled labor**	**Unskilled labor**
Agriculture	0.15	0.15	-0.81	-0.81
Mining	-.08	-.08	-.12	-.12
Processed food	.01	.01	-.12	-.13
Textiles and apparel	-.03	-.03	1.26	1.26
Iron and steel	-.04	-.04	.22	.22
Machinery and equipment	.11	.11	.02	.02
Transportation equipment	-.08	-.08	1.1	1.1
Chemical, rubber, and plastic	-.01	-.0	.2	.2
Other manufactures	-.03	-.02	-.09	-.09
Services	0	0	-.03	-.03

Source: GTAP database and USITC staff calculations.

Table 4-13
Changes in real rate of return, by components, experiment 1

(Percent)

Item	**United States**	**UK**	**EU**
Land	0.61	-2.9	-0.08
Unskilled labor	.02	.17	-.01
Skilled Labor	.02	.17	-.01
Capital	.02	.16	-.01
Natural resources	-.04	-.12	0

Source: GTAP database and USITC staff calculations.

Table 4-14
Changes in market prices, by commodities, experiment 1

(Percent)

Commodity	**United States**	**UK**	**EU**
Agriculture	0.14	-0.07	-0.06
Mining	.04	.17	-.04
Processed food	.08	.03	-.05
Textiles and apparel	.06	.09	-.05
Iron and steel	.05	.14	-.05
Machinery and equipment	.06	.08	-.05
Transportation equipment	.05	.06	-.05
Chemical, rubber, and plastic	.06	.11	-.05
Other manufactures	.07	.16	-.05
Services	.07	.25	-.05

Source: GTAP database and USITC staff calculations.

Total U.S. imports increase by $5.2 billion (0.61 percent): imports from the UK and the EU increase (by $4.8 (12.5 percent) and $1.4 billion (0.96 percent) respectively) and those from other regions slightly decrease. Due to the reciprocal imposition of new trade barriers, UK and EU exports are redirected away from each other and towards the North American economies and the Rest of the world.

The directions of the changes are largely consistent across sectors: U.S. exports to the UK increase substantially and those to all other regions decrease slightly (table 4-15). U.S. agricultural exports to the UK increase by almost 125 percent and processed food exports to by 85 percent. These sectors are among those with the highest barriers in the UK, and the removal of their trade barriers leads to substantial supply responses in the NAFTA members. In absolute terms, U.S. machinery exports to the UK increase by more than $3 billion, while services exports decline by $405 million.

U.S. imports from the UK and EU increase substantially and those from other regions decline slightly (table 4-16). Textile imports from the UK increase by 69 percent ($392 million). In absolute terms, machinery imports from the UK increase by $1.2 billion and services by $664 million.

UK exports to the NAFTA members increase by $8.8 billion. On the other hand, exports to the EU decrease by $18.8 billion. The directions of these changes are consistent across sectors (table 4-17). UK sectoral exports increase to Canada, Mexico, the United States, and the Rest of the world, while exports to the EU decrease, except for mining and services. UK exports of textile products to the United States, increase by 69 percent ($393 million) and transportation exports increase 33 percent ($904 million). Textile exports to Canada also increase by 124 percent ($107 million).

Total UK imports decrease by $13.8 billion (4.34 percent), with those from the EU declining by as much as $25 billion due mainly to the new trade barriers between the UK and the other EU members (table 4-18). UK imports from the NAFTA members increase by $7.9 billion. Imports of machinery products from the United States increase by $3 billion (22 percent) and transportation goods increase by $1.8 billion (72 percent). Agricultural imports from the United States increase by 125 percent ($724 million).

Table 4-15
Changes in U.S. exports, by commodities, experiment 2

Commodity	Canada	Mexico	UK	EU	Rest of world	Total
			Value *(million dollars)*			
Agriculture	-3.87	-7.71	724.43	-61.04	-178.72	473.09
Mining	-19.71	-5.64	28.19	-34.04	-44.22	-75.42
Processed food	-17.28	-6.47	439.32	5.57	-110.58	310.56
Textiles and apparel	-38.07	-9.72	386.4	-2.62	-60.92	275.07
Iron and steel	-72.37	-15.82	162.62	-39	-83.63	-48.2
Machinery and equipment	-271.34	-69.72	3071.77	-186.34	-917.58	1626.79
Transportation equipment	-199.12	-39.79	1820.46	-14.77	-406.28	1160.5
Chemical, rubber, and plastic	-87.77	-17.35	489.93	-64.3	-181.46	139.05
Other manufactures	-51.09	-16.13	326.37	-87.05	-182.66	-10.56
Services	-61.98	-25.02	-405.3	-812.58	-491.36	-1796.24
Total	-822.6	-213.37	7044.19	-1296.17	-2657.41	2054.64
			Percent			
Agriculture	-0.13	-0.34	124.91	-1.03	-0.58	1.11
Mining	-0.70	-0.37	3.93	-0.88	-0.53	-0.44
Processed food	-0.47	-0.47	85.00	0.24	-0.65	1.24
Textiles and apparel	-1.75	-0.44	60.43	-0.13	-0.72	1.78
Iron and steel	-1.00	-0.48	10.33	-1.23	-0.74	-0.18
Machinery and equipment	-0.78	-0.42	21.97	-0.46	-0.80	0.74
Transportation equipment	-0.76	-1.15	71.58	-0.13	-1.32	1.56
Chemical, rubber, and plastic	-0.72	-0.30	18.06	-0.47	-0.51	0.20
Other manufactures	-0.58	-0.43	11.57	-1.18	-0.83	-0.02
Services	-0.35	-0.44	-2.88	-1.27	-0.69	-1.04
Total	-0.69	-0.47	17.54	-0.84	-0.74	0.29

Source: GTAP database and USITC staff calculations.

Table 4-16
Changes in U.S. imports, by commodities, experiment 2

Commodity	Canada	Mexico	UK	EU	Rest of world	Total
			Value *(million dollars)*			
Agriculture	-4.39	12.36	13.01	19.89	43.93	84.8
Mining	-43.26	-6.98	329.32	41.93	-81.16	239.85
Processed food	-22.61	-2.86	201.08	53.56	-29.71	199.46
Textiles and apparel	-4.87	-4.7	392.97	33.61	-83.55	333.46
Iron and steel	-43.3	-5.04	294.38	74.17	-39	281.21
Machinery and equipment	-52.04	-19.18	1234.69	385.41	-152.36	1396.52
Transportation equipment	-150.43	4.09	904.5	284.24	-16.06	1026.34
Chemical, rubber, and plastic	-52.02	-5.74	477.25	48.09	-88.96	378.62
Other manufactures	-72.6	3	283.53	127.82	12.83	354.58
Services	-38.78	-3.5	663.77	377.27	-109.56	889.2
Total	-484.3	-28.55	4794.5	1445.99	-543.6	5184.04
			Percent			
Agriculture	-0.13	0.43	12.81	1.94	0.41	0.47
Mining	-0.27	-0.11	10.01	0.76	-0.19	0.32
Processed food	-0.57	-0.25	20.32	0.74	-0.28	0.83
Textiles and apparel	-0.24	-0.14	68.78	0.85	-0.24	0.75
Iron and steel	-0.36	-0.16	22.70	1.00	-0.18	0.62
Machinery and equipment	-0.23	-0.08	12.95	1.00	-0.09	0.54
Transportation equipment	-0.35	0.04	32.58	1.83	-0.04	0.92
Chemical, rubber, and plastic	-0.46	-0.32	12.97	0.34	-0.34	0.66
Other manufactures	-0.31	0.08	13.38	1.23	0.03	0.41
Services	-0.45	-0.10	4.78	0.80	-0.20	0.69
Total	-0.33	-0.05	12.54	0.96	-0.12	0.61

Source: GTAP database and USITC staff calculations.

The sectoral impacts of the FTA on the United States and the UK's trade balance are reported in table 4-19. The trade balance in the United States decreases by $2 billion (1.3 percent), while that of the UK increases by $2.9 billion (11.4 percent). Note that these numbers are much larger in absolute terms than those reported for experiment 1. The increase in the U.S. trade deficit is much larger because the UK and the EU are redirecting their exports away from each other and into the U.S. market. The UK figure reflects this substantial increase in exports to the United States and decrease in imports from the EU. The U.S. trade balance increases in agriculture by $499 million and in machinery by $593 million, but it decreases by $2.3 billion in the services sector. The trade balance of the EU increases by $2.2 billion (3.11 percent).

Gross domestic product and industrial employment

The effects of the contemplated FTA on each country's GDP are virtually zero. The GDP of the UK de-creases by 0.02 percent ($173 million) and the EU's by 0.01 percent ($708 million). U.S. GDP increases by $86 million (less than 0.001 percent) while Canada's GDP declines by $49 million (0.01 percent).

Table 4-21 shows the percentage changes in domestic production in the 10 sectors. The changes in output are generally low, and only in a few cases do they exceed 1 percent. In the United States, the preferential trading arrangement expands production in the agriculture, processed foods, textiles, machinery, and transportation sectors. The machinery sector expands by more that $1 billion. The other sectors shrink, with the services sector declining by more than $1 billion.

Table 4-17
Changes in UK exports, by commodities, experiment 2

Commodity	Canada	Mexico	US	EU	Rest of world	Total
			Value *(million dollars)*			
Agriculture	2.3	0.15	13.01	-1111.45	79.9	-1016.09
Mining	38.15	0.84	329.32	173.87	172.41	714.59
Processed food	39.93	1.59	201.08	-2881.71	131.03	-2508.08
Textiles and apparel	107.07	0.35	392.97	-1978.83	76.87	-1401.57
Iron and steel	105.04	1.95	294.38	-457.06	228.36	172.67
Machinery and equipment	335.08	13.39	1234.69	-4799.7	1150	-2066.54
Transportation equipment	139.88	3.61	904.5	-6397.91	190.8	-5159.12
Chemical, rubber, and plastic	113.37	3.64	477.25	-1425.2	232.1	-598.84
Other manufactures	56.32	2.12	283.53	-749.76	234.26	-173.53
Services	58.06	5.4	663.77	808.79	1264.35	2800.37
Total	995.2	33.04	4794.5	-18818.96	3760.08	-9236.14
			Percent			
Agriculture	5.59	5.10	12.81	-30.72	4.56	-18.43
Mining	8.51	3.73	10.01	1.36	3.65	3.36
Processed food	25.45	2.21	20.32	-40.46	2.03	-16.96
Textiles and apparel	123.51	2.78	68.78	-37.24	2.53	-15.53
Iron and steel	39.88	4.81	22.70	-4.51	4.56	1.03
Machinery and equipment	33.44	4.81	12.95	-12.46	4.41	-2.74
Transportation equipment	46.90	3.27	32.58	-43.41	3.06	-21.35
Chemical, rubber, and plastic	20.72	2.55	12.97	-6.77	2.36	-1.70
Other manufactures	27.73	4.95	13.38	-9.08	4.53	-1.10
Services	5.10	5.01	4.78	4.13	4.75	4.56
Total	23.78	3.97	12.54	-13.33	3.96	-3.31

Source: GTAP database and USITC staff calculations.

For the UK, the agreement expands output in the mining, iron and steel, other manufacturing, and services sectors with the services sector expanding by more that $2 billion (0.2 percent). The output of the remaining sectors declines, with that of the transportation sector contracting by more than $3 billion. Sectoral output changes are generally small in other regions. In the EU, processed food output decreases by $1.3 billion (0.19 percent) and agricultural output declines by $924 million (0.23 percent). Those drops results from the substantial decline in the exports of those sectors to the UK.

Table 4-22 reports the percentage change in the demand for skilled and unskilled labor in the United States and the UK. The size of these changes is small, especially for the United States (ranging from 0.01 percent to 0.23 percent). The impact of the arrangement is the same for skilled and unskilled labor. In the United States, employment declines in the mining, iron and steel, chemicals, other manufacturing, and services sectors, but increases in the remaining sectors. For the UK, the directions of the changes are the inverse of those for the United States. Demand for labor in textiles drops 3.4 percent and in the transportation sector it drops by 6 percent. These figures are similar to the decreases in UK sectoral output reported in Table 4-21.

Table 4-23 reports the changes in the payment made to the owners of the different primary factors of production. These changes are quite small in general. Real wages increase in the United States but decrease in the UK. As in the first experiment, the rental rate on land decreases by almost 3 percent in the UK, which results mainly from the elimination of the trade barriers on agricultural products. As output in the mining sector expands in the UK and declines in the United States, the payment to natural resources increases in the UK and decreases in the United States. In the EU, returns to all factors decrease, with the rental rate on land dropping by more than 1 percent as agricultural output declines.

Table 4-18
Changes in UK imports, by commodities, experiment 2

Commodity	Canada	Mexico	US	EU	Rest of world	Total
			Value *(million dollars)*			
Agriculture	46.18	0.92	724.43	-2083.56	383.27	-928.76
Mining	-2.66	-0.89	28.19	-56.07	-124.17	-155.6
Processed food	391.5	18.37	439.32	-4119.81	1047.65	-2222.97
Textiles and apparel	29.46	3.3	386.4	-2306.64	894.79	-992.69
Iron and steel	13.55	-0.14	162.62	-742.33	-9.27	-575.57
Machinery and equipment	202.29	0.89	3071.77	-6066.77	268.28	-2523.54
Transportation equipment	80.38	2.33	1820.46	-6885.42	1509.59	-3472.66
Chemical, rubber, and plastic	13.15	1.93	489.93	-1546.06	144.12	-896.93
Other manufactures	83.78	0.68	326.37	-1528.7	224.99	-892.88
Services	-18.8	-2.03	-405.3	-305.14	-452.11	-1183.38
Total	838.83	25.36	7044.19	-25640.5	3887.14	-13844.98
			Percent			
Agriculture	32.64	6.67	124.91	-50.96	6.57	-8.71
Mining	-0.58	-1.00	3.93	-1.36	-1.07	-0.92
Processed food	290.30	18.19	85.00	-41.63	18.06	-13.51
Textiles and apparel	63.33	11.46	60.43	-32.47	11.33	-6.32
Iron and steel	4.19	-0.14	10.33	-7.11	-0.17	-3.22
Machinery and equipment	28.53	1.17	21.97	-16.21	1.15	-3.34
Transportation equipment	80.87	33.77	71.58	-28.15	33.66	-10.99
Chemical, rubber, and plastic	10.33	2.47	18.06	-7.20	2.45	-2.96
Other manufactures	10.93	2.49	11.57	-10.00	2.43	-3.17
Services	-2.67	-2.32	-2.88	-1.45	-2.43	-2.17
Total	23.88	4.16	17.54	-16.51	3.96	-4.65

Source: GTAP database and USITC staff calculations.

Table 4-19
Changes in trade balance, experiment 2

(Million dollars)

Commodity	United States	UK	EU
Agriculture	498.79	-84.14	-599.63
Mining	-313.8	727.75	482.08
Processed food	171.21	-231.37	-1062.17
Textiles and apparel	-68.74	-407.1	-241.48
Iron and steel	-304.33	650.91	469.52
Machinery and equipment	593.28	-38.29	600.85
Transportation equipment	192.25	-1659.25	598.16
Chemical, rubber, and plastic	-123.69	150.23	440.95
Other manufactures	-334.77	630.99	186.5
Services	-2361.01	3198.98	1365.36
Total	-2050.81	2938.71	2240.14

Source: GTAP database and USITC staff calculations.

Table 4-20
Changes in gross domestic product, by regions, experiment 2

Country	Quantity	Value
	Percent	*Million dollars*
Canada	-0.01	-49.13
Mexico	0	0
United States	0	86.5
UK	-0.02	-173.25
EU	-0.01	-708
Rest of the world	0	394

Source: GTAP database and USITC staff calculations.

Table 4-21
Changes in output, by commodities, experiment 2

Commodity	Canada	Mexico	United States	UK	EU	Rest of world
			Percent			
Agriculture	0.27	0.07	0.17	-0.49	-0.23	0.05
Mining	-0.17	-.04	-.12	1.38	.14	-.09
Processed food	1.02	.05	.04	-.63	-.19	.07
Textiles and apparel	-.04	.02	.03	-3.4	-.22	.14
Iron and steel	-.22	-.07	-.05	0.3	.08	-.08
Machinery and equipment	.25	-.05	.13	-.93	.01	-.03
Transportation equipment	-.13	.06	.13	-5.89	.05	.24
Chemical, rubber, and plastic	-0.2	-.01	-.03	-.22	.07	-.02
Other manufactures	-0.1	.03	-.05	.55	0	-.04
Services	-.02	-.01	-.01	0.2	.01	0
			Value *(million dollars)*			
Agriculture	104.34	27.91	593.03	-233.81	-924.22	820.13
Mining	-94.17	-17.31	-424.69	1,053.66	618.38	-1310.5
Processed food	394.4	18.63	170.22	-596.95	-1,314.75	1,016.88
Textiles and apparel	-6.15	3.32	55.19	-957.83	-576.31	1117
Iron and steel	-92.61	-13.84	-222.28	193.52	482.63	-995.5
Machinery and equipment	120.66	-15.49	1,071.13	-1,314.78	91.69	-485.63
Transportation equipment	-85.29	13.73	705.81	-3,101.82	318.56	1401
Chemical, rubber, and plastic	-84.39	-3.78	-142.81	-197.38	438.19	-317.5
Other manufactures	-78.16	6.14	-247.38	471.99	28.63	-489.25
Services	-129.44	-19.13	-1,066.5	2,777.75	742	-280

Source: GTAP database and USITC staff calculations.

Table 4-22
Changes in demand for labor, by commodities, experiment 2

(Percent)

	United States		UK	
Commodity	**Skilled labor**	**Unskilled labor**	**Skilled labor**	**Unskilled labor**
Agriculture	0.23	0.23	-0.57	-0.55
Mining	-.15	-.15	1.77	1.82
Processed food	.03	.03	-.63	-.54
Textiles and apparel	.02	.02	-3.45	-3.35
Iron and steel	-.05	-.05	.25	.36
Machinery and equipment	.13	.13	-.97	-.86
Transportation equipment	.13	.13	-5.93	-5.83
Chemical, rubber, and plastic.	-.03	-.03	-.23	-.13
Other manufactures	-.05	-.05	.51	.61
Services	-.01	-.01	.19	.3

Source: GTAP database and USITC staff calculations.

Table 4-23
Changes in real rate of return, by components, experiment 2

(Percent)

Item	**United States**	**UK**	**EU**
Land	0.89	-2.87	-1.08
Unskilled labor	.03	-.81	-.08
Skilled labor	.03	-.73	-.07
Capital	.03	-.68	-.08
Natural resources	-.1	1.87	-.29

Source: GTAP database and USITC staff calculations.

Final prices paid by consumers

Table 4-24 reports the changes in the domestic market price in each sector for the United States, the EU and the UK. Except for the services sector in the UK, the changes are less that 1 percent in absolute value. The FTA leads to small price changes in the United States that can be explained by the increased level of income, accompanied by higher payments to factors of production in the United States. Prices decline slightly in the UK, as well as in the EU, as a response to the drops in the returns to the factors of production. The directions of these changes are consistent across sectors.

Table 4-24
Changes in market prices, by commodities, experiment 2

(Percent)

Commodity	**United States**	**UK**	**EU**
Agriculture	0.31	-0.88	-0.21
Mining	.15	-.67	-.13
Processed food	.22	-.37	-.12
Textiles and apparel	.19	-.32	-.09
Iron and steel	.18	-.8	-.14
Machinery and equipment	.19	-.75	-.12
Transportation equipment	.18	-.25	-.11
Chemical, rubber, and plastic	.19	-.61	-.12
Other manufactures	.2	-.78	-.14
Services	.21	-1.18	-.17

Source: GTAP database and USITC staff calculations.

Effects of Tariff Elimination on Bilateral U.S.-UK Foreign Direct Investment

In its letter of November 18, 1999, the Senate Finance Committee requested, *inter alia*, that the USITC estimate the effect on the United States and the UK of eliminating existing trade and investment barriers between them on the amount of FDI between the two countries. To assess the effects of trade liberalization on FDI, a series of partial-equilibrium models were constructed representing the activities of UK-owned manufacturing affiliates in the United States (i.e., UK foreign direct investment in the United States), and U.S.-owned manufacturing affiliates in the UK (i.e., U.S. foreign direct investment in the UK).

The analysis presented here does not cover all possible effects of a UK-North American FTA on foreign direct investment. First, it covers only bilateral FDI between the United States and the UK, excluding UK foreign direct investment in Canada and Mexico and Canadian and Mexican foreign direct investment in the UK. This is because the analysis relies heavily on U.S. Department of Commerce data, which reports extensively on the production and trade of both inbound and outbound U.S. FDI. Data of comparable detail generally is not available for FDI relationships not involving the United States. However, the bilateral FDI flows between the UK and the United States capture the bulk of FDI activity between the current NAFTA members and the UK. According to OECD data, the UK's outward direct investment position in the NAFTA region in 1996 was about £62.1 billion ($96.9 billion), of which £57.0 billion ($88.9 billion, or 92 percent) was in the United States. In the same year, the UK's inward direct investment position originating from NAFTA countries was about £57.6 billion ($89.9 billion), of which £54.0 billion ($84.2 billion, or 94 percent) was from the United States. Thus, analyzing bilateral U.S.-UK foreign direct investment activity captures much of the direct investment effects of any UK-NAFTA agreement.

Second, the analysis captures only the effects of tariff changes on FDI. No attempt is made to analyze nontariff barriers, or the effects that any investment provisions of a UK-North American FTA might have on FDI. If a FTA between the UK and NAFTA members were to follow the pattern of NAFTA itself, it would contain a legal regime for investment as well as merchandise trade. These provisions, embodied primarily in Chapter Eleven of NAFTA, oblige the parties to provide the better of national or MFN treatment, prohibit specified performance requirements, and require transferability of funds in investment-related transactions, compensation in the event of expropriation, and binding international arbitration of investor-state disputes. Each party lodged reservations to grandfather certain restrictions in its own FDI policies at the national or subnational level.[7] In the context of NAFTA, the provisions specified in the agreement primarily had the effect of locking in certain unilateral FDI reforms undertaken by Mexico in the form of international commitments.[8] The UK currently has fairly low barriers to foreign investment by international standards, though there are some restrictions in FDI in the aerospace industry and some media services.[9]

Third, the analysis focuses only on manufacturing FDI and does not attempt to assess effects on FDI in services or other sectors. This is because the bulk of merchandise trade associated with UK FDI in the United States and U.S. FDI in the UK is associated with manufacturing, and tariff changes operate through trade flows. Using the data in tables 2-8 and 2-9, one can show that 80 percent of the U.S. exports and imports associated with UK-owned affiliates in the United States is trade of manufacturing affiliates. Similarly, 59 percent of the U.S. exports and imports associated with U.S.-owned affiliates in the UK is trade of manufacturing affiliates. Another 17 percent of U.S. merchandise trade associated with UK-owned affiliates in the United States belongs to affiliates engaged in wholesale trade, while 34 percent of U.S. merchandise trade of U.S.-owned affiliates in the UK is trade of affiliates engaged in wholesale trade. Merchandise trade associated with the very large bilateral direct investments in finance, insurance, real estate, and other (mostly service) industries is negligible.

Thus, the channels for tariffs to affect bilateral U.S.-UK foreign direct investment are predominantly through manufacturing and wholesale trade. Lowering tariffs may potentially stimulate the activity of FDI in wholesale trade, particularly for U.S. exports to U.S. wholesale trade affiliates in the UK. Data limitations preclude an analysis of wholesale trade of the type performed here for manufacturing. These limitations arise partially from the heterogeneity of the goods entering into wholesale trade, which makes it difficult to assign

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[7] U.S. International Trade Commission, *The Impact of the North American Free Trade Agreement on the U.S. Economy and Industries: A Three-Year Review*, Publication 3045, June 1997, p. 2-15.

[8] Ibid., pp. 3-33 and 3-34.

[9] Gerald P. O'Driscoll, Jr., Kim R. Holmes and Melanie Kirkpatrick, *2000 Index of Economic Freedom*, Washington, DC: The Heritage Foundation and Dow Jones & Company, Inc., 2000, p. 462.

tariff rates to such trade. The analysis thus focuses on manufacturing as being both an empirically important and analytically tractable source of linkages between tariffs and FDI.

This analysis proceeds on the assumption that the investment provisions of any UK-North American FTA would primarily replicate the already existing fairly open national policies and WTO commitments of the parties, rather than lower any substantial barriers in sectors that the various parties have chosen in the past to reserve. The primary results of the analysis thus rely on the indirect effects of tariff changes on FDI rather than on any presumed impact of a UK-North American FTA on FDI policies themselves. The potential effects of tariffs on FDI are outlined in the following section.

Primary Effects on Foreign Direct Investment

There are three primary methods through which a reduction in barriers to merchandise trade can affect FDI. Each of these three channels operates in the partial-equilibrium model used for the present analysis, by affecting a different tariff. Because the effects operate in different directions, it cannot be inferred *a priori* whether a given set of tariff cuts will encourage or discourage FDI. Thus, modeling the tariff effects based on the empirical situation facing different sectors in different countries is warranted in order to draw inferences about whether tariff liberalization will likely stimulate or retard FDI. The three methods are:

- *Tariff-hopping:* Multinational firms may choose FDI as a method of servicing a foreign market in part because tariffs make it expensive to export directly from the home market. This phenomenon is often known as "tariff-hopping" direct investment. A reduction in tariffs thus makes exporting cheaper, and exports should increase while output of affiliates financed by FDI should decrease. This channel operates through the tariff on imports which compete with locally produced output, whether or not such output is controlled through FDI.

- *Vertical integration:* Multinational firms often engage in vertical integration or "slicing up the value chain," producing components, raw or semifinished merchandise, or other goods in one country and shipping them to another country for further processing, final assembly, or as final goods to fill out a product line. Tariffs thus become part of the production costs of the firm. The reduction of these tariffs lowers costs in the final assembly operation, giving it an incentive to expand. Production operations located entirely in the domestic market may also import inputs, and experience cost savings when tariffs fall. Nonetheless, the share of imported inputs will often be higher in a vertically integrated multinational firm, enabling it to enjoy deeper cost reductions as a result of trade liberalization. This channel operates through the tariff on imports purchased by both FDI-controlled firms and domestically owned firms by the country in which those firms produce.

- *Export opportunities*: A reduction in tariffs in a foreign market gives firms incentives to export to that market, whether they are financed by FDI or domestically. Thus, tariff reductions should be associated with increases in output from both domestic and foreign firms. If affiliates of multinational firms are more export-oriented than domestically owned firms, the incentives for output expansion associated with falling tariffs in export markets are correspondingly greater. This channel operates through reduction on the tariff charged in the export market of the FDI partner.

The effect of tariff-hopping suggests that merchandise trade and FDI are *substitutes*: if tariffs are cut, trade rises while FDI falls, and if tariffs increase, trade falls while FDI increases. The effects of vertical integration and export opportunities suggest that trade and FDI are *complements*: trade liberalization causes both to increase, while increases in trade barriers cause both to fall. Because the tariff-hopping, the vertical integration, and export opportunity effects all operate simultaneously, the effects of trade liberalization, and UK-North American FTA specifically seem ambiguous at first; FDI could either increase or decrease.[10] The

[10] A good deal of attention has been devoted in the academic literature on FDI to the question of whether trade and FDI are in practice substitutes or complements, with most but not all empirical work finding evidence that complementarity between trade and FDI prevails on balance. Examples

partial-equilibrium model used in this study takes into account all three effects at once, generating estimates of either increasing or decreasing FDI due to tariff cuts, which are based on the particular data and market conditions faced by the industry in question.

Modeling Techniques

Partial-Equilibrium Modeling

The three effects of tariff changes on FDI are modeled in this study using a partial equilibrium model similar in some respects to the COMPAS model used in previous USITC analytical work.[11] The model is used to analyze 11 manufacturing sectors in both the United States and the UK, as listed in table 4-25.[12] The underlying microeconomic structure of the model is described in appendix F. A concordance defining each of the 11 sectors in terms of the categories in the underlying data sources is found in appendix G.

The simultaneous removal of all three tariffs corresponds to the first scenario in the CGE modeling described earlier in the chapter, one in which tariffs areeliminated between the UK and the United States without removing the current duty-free status of trade between the UK and the EU. Results are reported aschanges in output of the FDI-financed component in each market. A second experiment, corresponding to the second CGE scenario, combines tariff elimination between the UK and the United States with the imposition of tariffs between the UK and the EU at the EU's current MFN rate. This experiment is performed on the 11 sectors in the UK market.

Sectors used in partial equilibrium modeling of FDI

- Food, beverages, and tobacco
- Textiles and apparel
- Wood and furniture
- Paper, printing, and publishing
- Chemical products
- Non-metallic minerals
- Primary and fabricated metals
- Machinery and equipment (including computers)
- Electronic and other electrical machinery
- Transport equipment
- Other manufacturing

Data Sources and Data Issues

Production and trade data for the model are calibrated for the year 1997, the most recent year for which the data were sufficiently complete at the time of the analysis. Data on the production, exports and imports associated with U.S.-owned affiliates in the UK comes from the U.S. Department of Commerce's Bureau of Economic Analysis (BEA) survey of U.S. direct investment abroad, while corresponding data for the operations of UK-owned affiliates in the United States comes from the BEA survey of foreign direct investment in the United States. Other output and trade data needed to complete the model are taken from the OECD's STAN Database for Industrial Analysis, U.S. Department of Commerce trade data, and United Nations trade data. The WTO's Integrated Data Base was

10—*Continued*
of studies finding complementarity between trade and direct investment are Magnus Blömstrom, Robert E. Lipsey, and Ksenia Kulchycky (1988), "U.S. and Swedish Direct Investment and Exports, in R.E. Baldwin (ed.), *Trade Policy Issues and Empirical Analysis,* Chicago: University of Chicago Press, pp. 259-97; Rene Belderbos and Leo Sleuwaegen (1998), "Tariff Jumping FDI and Export Substitution: Japanese Electronics Firms in Europe," *International Journal of Industrial Organization,* vol 16 no.5, pp. 601-638; Edward M. Graham (1999), "Foreign Direct Investment Abroad and Manufacturing Trade: Empirical Results Based on Japanese and U.S. Data," in Dennis Encarnation (ed.), *Japanese Multinationals in Asia: Regional Operations in Comparative Perspective,* London: Oxford University Press; Kimberly Clausing (forthcoming), "Does Multinational Activity Displace Trade?" *Economic Inquiry;* and Birgitta Swedenborg (forthcoming), "Determinants and Effects of MNC Growth: The Swedish Case," in Magnus Blömstrom and Linda Goldberg, eds., *Topics in Empirical International Economics: A Festschrift in Honor of Robert E. Lipsey,* Chicago: University of Chicago Press. By contrast, Bruce Blonigen (1999), "In Search of Substitution Between Foreign Production and Exports," Working Paper, University of Oregon, focusing on narrowly defined products which may be either exported from Japan to the United States or produced in the United States by Japanese affiliates, finds evidence for substitution between trade and FDI.

11 For a general description of COMPAS and related partial equilibrium techniques, see Joseph F. Francois and H. Keith Hall (1997), "Partial Equilibrium Modeling," Chapter 5 in Joseph F. Francois and Kenneth A. Reinert, eds., *Applied Methods for Trade Policy Analysis*, London: Cambridge University Press, pp. 122-155.

12 These sectors differ somewhat from those used in the CGE analysis due to data coverage, and because of the focus on manufactures. They cover the same activity as the seven sectors in the CGE analysis other than agriculture, mining, and services.

Table 4-25
Estimated changes in sales of foreign affiliates, by scenarios

Item	Scenario I: Tariff elimination between the United Kingdom and the United States				Scenario II: Scenario I plus imposition of a tariff between the United Kingdom and the EU	
	UK affiliates in the United States		U.S. affiliates in the United Kingdom		U.S. affiliates in the United Kingdom	
	Millions dollars	*Percent*	*Millions dollars*	*Percent*	*Millions dollars*	*Percent*
Food, beverages, and tobacco	59	0.30	12	0.08	-8	-0.05
Textiles and apparel	6	.31	19	1.19	-34	-2.18
Wood and furniture	([1])	.02	1	.13	-3	-.24
Paper, printing, and publishing	4	.05	4	.06	-15	-.25
Chemical products	269	.57	98	.22	-467	-1.03
Nonmetallic minerals	6	.08	6	.48	-9	-.77
Primary and fabricated metals	8	.12	8	.18	-45	-.95
Machinery and equipment, including computers	6	.05	92	.30	-157	-.51
Electronic and electrical equipment	23	.56	64	.59	-66	-.61
Transportation equipment	9	.11	47	.19	-41	-.17
Other manufacturing	18	.37	62	.75	-6	-.08
Total or average	408	.41	413	.27	-851	-.56
Lower bound for total	138	.14	128	.08	-159	-.11
Upper bound for total	701	.71	760	.50	-1,795	-1.19

[1] Less than $500,000.
Source: USITC staff calculations.

used to calculate aggregate post-Uruguay Round most favored nation tariffs of the United States and the European Union for the sectors used in the modeling. These tariffs are adjusted in the base data to reflect full implementation of the Information Technology Agreement prior to the UK-North American FTA. Some data elements are USITC staff estimates, mainly for cases in which BEA suppresses data for disclosure reasons and for imported inputs not associated with FDI. A more detailed description of data sources and methods is contained in appendix F.

Principal Results

The results of the partial equilibrium modeling are presented in table 4-25. They suggest that a UK-North American FTA (Experiment 1) would induce only a small expansion of the output associated with bilateral manufacturing FDI between the UK and the United States, by about 0.41 percent for UK FDI in the United States and by about 0.27 percent for U.S. FDI in the UK. A UK-North American FTA combined with imposition of the EU's common external tariff between the UK and other EU countries (Experiment 2) would induce small contraction of the output associated with U.S. manufacturing FDI in the UK, by about 0.56 percent (table 4-25). Staff analysis of the results suggests that the primary channel through which tariff decreases or increases affect FDI is by lowering and raising the cost of imported intermediate inputs. Sensitivity analysis was performed varying the range of elasticities used in the model within plausible limits. The lower- and upper-bound estimates presented in table 4-25 are the sums of the lower- and upper-bound estimates for each of the individual sectors.

In absolute terms, the reported effects on FDI in the chemicals industry are the largest, reflecting the fact that chemicals-industry FDI is the most important subsector of manufacturing FDI on either side of the bilateral U.S.-UK relationship. Percentage effects vary

in magnitude across sectors. In cases for which the percentage changes are relatively large, either the associated tariff changes are large or the FDI activity has relatively strong linkages to merchandise trade, or both.

Experiment 1: Tariff Elimination Between the United Kingdom and North America

Effects on Foreign Direct Investment in the United States

The estimated effect of bilateral tariff elimination between the United States and UK is to increase the output of UK-owned manufacturing affiliates in the United States by approximately $408 million (0.27 percent). The largest estimated sectoral increases in dollar terms are for chemical products ($269 million), food, beverages, and tobacco ($59 million), and electronic and electrical equipment ($23 million). The largest estimated sectoral increases in percentage terms are for chemical products (0.57 percent), electronic and electrical equipment (0.56 percent), and other manufacturing (0.37 percent).

Effects on U.S. Direct Investment in the United Kingdom

The estimated effect of bilateral tariff elimination between the United States and UK is to increase the output of U.S.-owned manufacturing affiliates in the UK by approximately $413 million (0.27 percent). The largest estimated sectoral increases in dollar terms are for chemical products ($98 million), machinery and equipment including computers ($92 million), and electronic and electrical equipment ($64 million). The largest estimated sectoral increases in percentage terms are for textiles and apparel (1.19 percent), other manufacturing (0.75 percent), and electronic and electrical equipment (0.48 percent).

Experiment 2: Tariff Elimination Between the United Kingdom and North America, with Imposition of a Tariff Between the United Kingdom and European Union

The estimated effect of bilateral tariff elimination between the United States and UK, coupled with imposition of the EU's Common External Tariff between the UK and other EU members, is to decrease the output of U.S.-owned manufacturing affiliates in the UK by a fairly small amount of approximately $851 million (0.56 percent). The upper bound obtained for this result in the sensitivity analysis is a decline of $1.795 billion (1.19 percent). These small effects attributable to tariff cuts contrast with the views of various UK academic trade specialists, business leaders, and government officials reported in Chapter 1, many of whom believe dramatic reductions in FDI would follow the UK's leaving the EU.

The largest estimated sectoral decreases in dollar terms are for chemical products ($467 million), machinery and equipment, including computers ($157 million), and electronic and electrical equipment ($66 million). The largest estimated sectoral decreases in percentage terms are for textiles and apparel (2.18 percent), chemical products (1.03 percent), and primary and fabricated metals (0.95 percent).[13]

[13] For three of the sectors (food, beverages, and tobacco; transport equipment; and other manufacturing) sensitivity analysis revealed some cases in which output associated with FDI could increase under the terms of experiment 2. This could happen if the raising of the tariff to the EU lowers imports from the EU enough so that all output in the UK, including output of U.S.-owned firms, expands significantly, and this effect predominates (i.e., the tariff-hopping effect outweighs the vertical integration effect and the export opportunity effect combined). For each of the three sectors, however, output was estimated to contract over a larger range of elasticities than it was estimated to expand.

APPENDIX A
Request Letter
From the U.S. Senate Committee on Finance

United States Senate
COMMITTEE ON FINANCE
WASHINGTON, DC 20510-6200

November 18, 1999

The Honorable Lynn M. Bragg
Chairman
United States International Trade Commission
500 E Street, SW
Washington, D.C. 20436

Dear Madame Chairman:

The Senate Finance Committee seeks to further trade liberalization on a global basis. The Committee believes that lowering barriers to international commerce increases trade between nations and leads to increased economic prosperity and higher standards of living. As part of the policy making process, the Senate Committee on Finance has a need for impartial and detailed information on the economic impact of free trade agreements that embody trade liberalization.

In recent years, the U.S. - Canadian Free Trade Agreement (CFTA) and the North American Free Trade Agreement (NAFTA) have significantly helped expand the volume of trade between the United States and its North American trading partners. The Committee seeks an analysis in order to determine whether the success of the CFTA and NAFTA can be replicated with other trading partners.

The Committee therefore requests, pursuant to section 332(g) of the Tariff Act of 1930, that the U.S. International Trade Commission (the Commission) investigate the impact on the U.S. economy of including the United Kingdom in a free trade arrangement with the United States, Canada and Mexico and provide a report setting forth the results of that investigation. In its report, the Committee requests that the Commission provide, to the extent possible, the following:

- An overview of the current economic relationship among the United States, Canada, Mexico and the United Kingdom in terms of trade and investment flows, including a discussion of the key industries and comparative advantages of each country.

- Identification of all existing barriers (tariff and non-tariff) to trade and

investment among the United States, Canada, Mexico and the United Kingdom.

- For the United States and the United Kingdom, the estimated effect of eliminating these barriers on:
  - the volume of trade in goods and services between the two countries;
  - Gross Domestic Product for each country resulting from increased trade and investment;
  - employment across industry sectors, with special attention to changes in the competitive position of industries, job creation and loss, productivity and wages;
  - balance of payments for each country as a result of new trade patterns;
  - amount of foreign direct investment between the two countries;
  - final prices paid by consumers in each country.

- A discussion on any increase in quality or selection of goods, or other consumer benefits.

The Commission should provide its completed report no later than 9 months from the receipt of this request.

Sincerely,

William V. Roth, Jr.
Chairman

Daniel Patrick Moynihan
Ranking Member

APPENDIX B
Federal Register Notice

EFFECTIVE DATE: December 14, 1999.

FOR FURTHER INFORMATION CONTACT: Jozlyn Kalchthaler (202–205–3457), Office of Investigations, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202–205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its internet server (http://www.usitc.gov).

SUPPLEMENTARY INFORMATION:

Background

The final phase of this investigation is being scheduled as a result of an affirmative preliminary determination by the Department of Commerce that imports of synthetic indigo from China are being sold in the United States at less than fair value within the meaning of section 733 of the Act (19 U.S.C. 1673b). The investigation was requested in a petition filed on June 30, 1999, by Buffalo Color Corp., Parsippany, NJ, and the United Steelworkers of America, AFL–CIO/CLC.

Participation in the Investigation and Public Service List

Persons, including industrial users of the subject merchandise and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in the final phase of this investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, no later than 21 days prior to the hearing date specified in this notice. A party that filed a notice of appearance during the preliminary phase of the investigation need not file an additional notice of appearance during this final phase. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigation.

Limited Disclosure of Business Proprietary Information (BPI) Under an Administrative Protective Order (APO) and BPI Service List

Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in the final phase of this investigation available to authorized applicants under the APO issued in the investigation, provided that the application is made no later than 21 days prior to the hearing date specified in this notice. Authorized applicants must represent interested parties, as defined by 19 U.S.C. 1677(9), who are parties to the investigation. A party granted access to BPI in the preliminary phase of the investigation need not reapply for such access. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff Report

The prehearing staff report in the final phase of this investigation will be placed in the nonpublic record on April 19, 2000, and a public version will be issued thereafter, pursuant to section 207.22 of the Commission's rules.

Hearing

The Commission will hold a hearing in connection with the final phase of this investigation beginning at 9:30 a.m. on May 2, 2000, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before April 24, 2000. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on April 27, 2000, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by sections 201.6(b)(2), 201.13(f), and 207.24 of the Commission's rules. Parties must submit any request to present a portion of their hearing testimony *in camera* no later than 7 days prior to the date of the hearing.

Written Submissions

Each party who is an interested party shall submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.23 of the Commission's rules; the deadline for filing is April 26, 2000. Parties may also file written testimony in connection with their presentation at the hearing, as provided in section 207.24 of the Commission's rules, and posthearing briefs, which must conform with the provisions of section 207.25 of the Commission's rules. The deadline for filing posthearing briefs is May 9, 2000; witness testimony must be filed no later than three days before the hearing. In addition, any person who has not entered an appearance as a party to the investigation may submit a written statement of information pertinent to the subject of the investigation on or before May 9, 2000. On May 25, 2000, the Commission will make available to parties all information on which they have not had an opportunity to comment. Parties may submit final comments on this information on or before May 30, 2000, but such final comments must not contain new factual information and must otherwise comply with section 207.30 of the Commission's rules. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's rules do not authorize filing of submissions with the Secretary by facsimile or electronic means.

In accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: This investigation is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.21 of the Commission's rules.

Issued: December 22, 1999.

By order of the Commission.

Donna R. Koehnke,

Secretary.

[FR Doc. 99–33904 Filed 12–29–99; 8:45 am]

BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

[Investigation 332–409]

The Impact on the U.S. Economy of Including the United Kingdom in a Free Trade Arrangement with The United States, Canada, and Mexico

AGENCY: International Trade Commission.

ACTION: Institution of investigation and scheduling of public hearing.

EFFECTIVE DATE: December 21, 1999.

SUMMARY: Following receipt of a request on November 18, 1999, from the Senate Committee on Finance (Committee), the Commission instituted investigation No. 332–409, The Impact on the U.S. Economy of Including the United Kingdom in a Free Trade Arrangement

with the United States, Canada, and Mexico, under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)). The Commission plans to submit its report by August 18, 2000.

As requested by the Committee, the Commission will provide to the extent possible:

- An overview of the current economic relationship among the United States, Canada, Mexico, and the United Kingdom in terms of trade and investment flows, including a discussion of the key industries and comparative advantages of each country.
- Identification of all existing barriers (tariff and non-tariff) to trade and investment among the United States, Canada, Mexico, and the United Kingdom.
- For the United States and the United Kingdom, the estimated effect of eliminating these barriers on:
- The volume of trade in goods and services between the two countries;
- Gross Domestic Product for each country resulting from increased trade and investment
- Employment across industry sectors, with special attention to changes in the competitive position of industries, job creation and loss, productivity, and wages;
- Balance of payments for each country as a result of new trade patterns;
- Amount of foreign direct investment between the two countries,;
- Final prices paid by consumers in each country.
- A discussion on any increase in quality or selection of goods, or other consumer benefits.

FOR FURTHER INFORMATION CONTACT: Information may be obtained from Kyle Johnson, Project Leader (202–205–3229) or Soamiely Andriamananjara, Deputy Project Leader (202–205–3252), Office of Economics, U.S. International Trade Commission, Washington, DC 20436. For information on the legal aspects of this investigation, contact William Gearhart of the Office of the General Counsel (202–205-3091). Hearing impaired individuals are advised that information on this matter can be obtained by contacting the TDD terminal on (202) 205–1810.

Background

In its letter to the Commission, the Committee stated that the U.S.-Canada Free Trade Agreement (CFTA) and the North American Free Trade Agreement (NAFTA) have significantly helped to expand the volume of trade between the United States and its North American trading partners, and that the Committee seeks an analysis in order to determine whether the success of the CFTA and NAFTA can be replicated with other trading partners.

In estimating the effect of the elimination of barriers to trade and investment on the economies of the United States and the United Kingdom, the Commission will conduct a comparative statics analysis based on the most current data available on trade, investment, the barriers to these flows, and the trade and investment relationships between these countries and their other significant trading partners.

Public Hearing

A public hearing in connection with the investigation will be held at the U.S. International Trade Commission Building, 500 E Street SW, Washington, DC, beginning at 9:30 a.m. on April 11, 2000. All persons shall have the right to appear, by counsel or in person, to present information and to be heard. Requests to appear at the public hearing should be filed with the Secretary, United States International Trade Commission, 500 E Street SW, Washington, DC 20436, no later than 5:15 p.m., March 28, 2000. Any prehearing briefs (original and 14 copies) should be filed not later than 5:15 p.m., April 4, 2000; the deadline for filing post-hearing briefs or statements is 5:15 p.m., May 5, 2000. In the event that, as of the close of business on April 7, 2000, no witnesses are scheduled to appear at the hearing, the hearing will be canceled. Any person interested in attending the hearing as an observer or non-participant may call the Secretary of the Commission (202–205–1806) after April 7, 2000, to determine whether the hearing will be held.

Written Submissions

In lieu of or in addition to participating in the hearing, interested parties are invited to submit written statements (original and 14 copies) concerning the matters to be addressed by the Commission in its report on this investigation. Commercial or financial information that a submitter desires the Commission to treat as confidential must be submitted on separate sheets of paper, each clearly marked "Confidential Business Information" at the top. All submissions requesting confidential treatment must conform with the requirements of section 201.6 of the Commission's Rules of Practice and Procedure (19 C.F.R. 201.6). All written submissions, except for confidential business information, will be made available in the Office of the Secretary of the Commission for inspection by interested parties. To be assured of consideration by the Commission, written statements relating to the Commission's report should be submitted to the Commission at the earliest practical date and should be received no later than the close of business on May 4, 2000. All submissions should be addressed to the Secretary, United States International Trade Commission, 500 E Street SW, Washington, DC 20436. The Commission's rules do not authorize filing submissions with the Secretary by facsimile or electronic means.

Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its Internet server (http://www.usitc.gov).

List of Subjects

NAFTA, United Kingdom, tariffs, investment, and imports.

Issued: December 22, 1999.

By order of the Commission.

Donna R. Koehnke,

Secretary.

[FR Doc. 99–33905 Filed 12–29–99; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF JUSTICE

Notice of Lodging of Consent Decree Pursuant to the Comprehensive Environmental Response, Compensation and Liability Act

In accordance with Departmental policy, 28 CFR 50.7, and Section 122 of CERCLA, 42 U.S.C. 9622, notice is hereby given that on December 16, 1999, a proposed Consent Decree in *United States* v. *Akzo Nobel Coatings, Inc., et al.*, Civil Action No. 95–71470, was lodged with the United States District Court for the Eastern District of Michigan, Southern Division. This consent decree represents a settlement of claims of the United States against Gage products Company for reimbursement of response costs and injunctive relief in connection with the Metamora Landfill Superfund Site ("Site") pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9601 *et seq.*

Under this settlement with the United States, Gage Products Company will pay $187,020.49 in reimbursement of response costs incurred by the United States Environmental Protection Agency at the Site.

The Department of Justice will receive for a period of thirty (30) days from the

APPENDIX C
The North American Free Trade Agreement

The North American Free Trade Agreement

Overview

The North American Free Trade Agreement (NAFTA) between the governments of Mexico, Canada, and the United States was signed into law in the United States by President Clinton on December 8, 1993 and was implemented January 1, 1994. The 1988 U.S. Canada Free Trade Agreement (CFTA) was a precursor to the NAFTA. Most of the CFTA was incorporated into NAFTA by specific reference between Canada and the United States.

Article 2205 of NAFTA provides the legal basis for other countries to join the agreement. Chile and Trinidad and Tobago considered accession in 1994. Chile was formally invited to enter accession negotiations in 1995. Trinidad and Tobago also considered accession to NAFTA beginning in 1994. The NAFTA accession clause does not restrict the location of potential members, but U.S. legislation requires Congressional approval. The loss of "fast track" negotiating authority in the United States contributed to the eventual withdrawal of Chile's accession proposal, and other agreements with Mexico and Canada provided many of the benefits that would have accrued through NAFTA membership. Chile already had a free trade agreement with Mexico, predating NAFTA. Chile and Canada implemented a NAFTA-like free trade agreement on June 2, 1997, which included side agreements on labor and environment similar to the NAFTA side agreements. Moreover, accession to NAFTA for other countries, including the United Kingdom, would most likely require adoption of the trilateral side agreements on labor and environment, which were part of the Chile accession package. Aside from NAFTA accession, other countries, including the United Kingdom, may enter into bilateral agreements with individual NAFTA members. These bilateral free trade agreements can extend the same level of trade liberalization as provided in the NAFTA, although such agreements could be applied or amended in a manner different from NAFTA.

Trade liberalization under NAFTA primarily involves reduction of existing tariffs and tariffication of nontariff barriers. Tariffs on goods and services negotiated under the NAFTA are eliminated in a four-tier tariff schedule. Many tariffs were eliminated upon implementation of NAFTA in 1994. Additional tariffs were eliminated within five years of implementation, while others are to be phased in over 10 years, with a maximum 15-year staging provision for some sensitive goods. In addition to the four-tier schedule, tariffs may be eliminated at an earlier date through mutual agreement. Two rounds of accelerated tariff eliminations under article 302.3 of NAFTA have been completed. Further accelerated tariff elimination rounds will involve bilateral negotiations between Mexico and each of the other two members, as Canada and the United States have already completed their scheduled mutual tariff reductions. Mexico's import licenses for some goods were replaced with tariff-rate quotas (TRQs). The rights to import under the Mexican TRQs are auctioned off by the Mexican government, and over the transition period, the quota quantity will increase and the duty for above-quota quantities will decrease until the trade barrier is eliminated.

NAFTA requires goods to have North American origin under agreed rules in order to qualify for preferential tariff treatment. This implies that goods must be obtained, produced, or fabricated from North American materials (those of Canada, Mexico, United States), or if nonoriginating materials, goods must have undergone a transformation, in a member country, that changes the tariff classification of the good in stated ways. A few industries also have regional value content (RVC)

requirements.[1] Textile tariffs were eliminated immediately or are scheduled to be removed over a 6-to-10-year period for goods meeting rules-of-origin.[2] Many textile tariffs were dropped in five year staging as of January 1, 1999. NAFTA textile rules determine if a good qualifies for a tariff preference, notwithstanding precedence over those adopted under section 334 of the Uruguay Round Agreement Act or rules related to the international Multifiber Arrangement.

NAFTA does not cover maritime or air transportation.[3] NAFTA does cover certain aspects of ground transportation, such as inter-NAFTA trucking services, tour buses, and small parcel delivery services. NAFTA liberalization required opening of roads to member nation truckers six years after the agreement was to be implemented on January 1, 2000. Bus companies were to be authorized to cross NAFTA borders after three years, as of January 1, 1997. However, safety disagreements have continued to delay liberalization in ground transportation between the United States and Mexico. Ground transportation rules in the NAFTA would not be an accession issue for a country located outside of North America. However, air and maritime transportation services may become an issue if NAFTA expands beyond North America.

Some industry sectors were not liberalized regionally. Telecommunications services are excluded from NAFTA, except for value-added services. The Mexican banking sector remains relatively closed. As part of the agreement, the market share for Canadian and U.S. banks operating in Mexico rose from 8 percent to 15 percent over the period 1994 to 2000.

Two chapters of NAFTA cover standards and Sanitary and Phytosanitary (SPS) measures. NAFTA agreements on agricultural products were negotiated bilaterally, between Canada and Mexico and between the United States and Mexico because existing CFTA bilateral provisions were not abrogated. Agriculture products follow the four-tier phase-out, with immediate removal of some tariff and quantity restrictions, as well as a 5-year phase-out, 10-year phase-out, and 15-year schedule for the most sensitive products (for example, Mexican orange juice and U.S. corn). Nontariff barriers were converted to TRQs on some Mexican agricultural goods.[4] NAFTA includes a working group on agricultural subsidies to eventually eliminate subsidies affecting trade between NAFTA members.

Government contracts over a minimum set value ($250 million for goods and services, $8 million for construction services) must allow all NAFTA-country companies to bid under contract opportunities and conditions no less favorable than those of domestic suppliers. This provision excludes contracts for procurement of weapons, ammunition, arms, and other items of national security. Mexico has a 10 year phase-in period, with a $1.5 billion set-aside limitation on government procurement, for opening its bidding process.

Both private persons and member governments can request dispute settlement under the NAFTA. Private parties from NAFTA member countries can appeal adverse results in antidumping (AD) or countervailing proceedings (CVD) to a binational panel of experts, under Chapter 19. This legal framework reflects an evolution of the dispute settlement procedure developed under the CFTA. Panels of experts may also hear disputes in financial services (Chapter 14), investor-state disputes (Chapter 11), and other NAFTA-related disputes (Chapter 20).

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[1] Required RVC for preferential treatment under NAFTA was 56 percent on January 1, 1998, rising to 62.5 percent by January 1, 2002 for passenger autos, light trucks, their engines and transmissions. For other vehicles and parts, the 55 percent RVC will rise to 60 percent by January 1, 2002.

[2] Yarn forward and fiber forward rules limit preferential tariff treatment only for those goods produced with yarn or yarn and fibers (for cotton and manmade fibers) from a NAFTA member country. Some fabrics are exempt and some fabrics are allowed preferential treatment up to an import ceiling.

[3] U.S. fees on air and maritime passenger services through 2003 provided some of the NAFTA funding as required by the Budget Enforcement Act of 1990 and the 1993 Omnibus Budget Reconciliation Act.

[4] Mexico negotiated reciprocal Uruguay Round concessions and thus still has preferential access for U.S. over-TRQ rate lines as established in the NAFTA.

Intra-NAFTA Trade Flows

Trade flows among the NAFTA partners increased substantially following implementation of the agreement in 1994 (table C-1). Total intra-NAFTA trade flows (imports plus exports) among members averaged $271 billion annually between 1990 and 1993, but in the first five years of NAFTA (1994-1998) trade flows averaged $462 billion annually. U.S. trade with NAFTA partners grew by a total of 75 percent from 1990 to 1993, and 68 percent between 1994 and 1998. The slower growth post-NAFTA implementation is largely attributed to worsening macroeconomic conditions in Mexico.

Although U.S. trade with Mexico has grown before and since NAFTA implementation, growth in U.S. imports has outpaced growth in U.S. exports. Twelve months following NAFTA implementation, the Mexican peso was significantly devalued in December 1994.[5] The impact of the Mexican peso crisis and resulting economic recession changed the net U.S. trade surplus with Mexico to a deficit in 1995 (figure C-1). But U.S. exports to Mexico grew a total of 62 percent between 1994 and 1998, despite the Mexican economic crisis. Mexico is the third most important trading partner for the United States. Mexico supplied 11.7 percent of total U.S. imports and purchased 13.0 percent of total U.S. exports in 1998, the latest year in which data is available.

The United States maintained a trade deficit with Canada between 1990 and 1998 (figure C-2). Although the deficit with Canada has been growing, bilateral trade volumes have increased. Canadian imports from the United States grew by a total of 76 percent from 1994 to 1998, while the U.S. share of Canadian imports rose slightly, from 70 percent of total Canadian imports in 1990 to 73 percent in 1998. The U.S. share of Canadian exports to the world rose from 75 percent of total exports in 1990 to 83 percent in 1998. Canada continues to be the number one trading partner for the United States. Canada consumed 20.4 percent of total U.S. exports and provided 21.2 percent of total U.S. imports in 1998.

Trade between Mexico and Canada contributed less than 1 percent to pre-NAFTA trade flows in North America (figure C-3), but slightly exceeded 1 percent of intra-NAFTA trade flows in each of the years after NAFTA implementation. Canadian exports to Mexico continually rose over the study period (1990 - 1998), however, growth in Canadian exports was higher under NAFTA (table C- 2). Mexican exports to Canada rose slowly in the four years prior to NAFTA for a total of 32 percent from 1990 through 1993. However, Mexican exports to Canada increased by a total of 63 percent between 1994 and 1998.

Intra-NAFTA Investment

The stock of U.S.-owned assets in NAFTA countries increased by nearly 60 percent over the 1990 through 1997 data period (table C-3). U.S.-owned assets throughout the world, including NAFTA, increased by more than 100 percent during the same period, from approximately $430 billion to $860 billion. The stock of U.S. investment in NAFTA countries as a percentage of total U.S. investment has declined from an average of 17 percent pre-NAFTA (1990 - 1993) to an average of 14 percent post-NAFTA (1994 - 1997).

The stock of foreign-owned assets in the United States grew by a total of 73 percent from 1990 through 1997. Foreign-owned assets in the United States held by investors in Canada and Mexico has grown at a significantly greater rate, by 118 percent from 1990 through 1997. The share of NAFTA country investors' holdings as a percentage of all foreign-owned assets in the United States has risen from 8 percent of the approximately $400 billion stock of foreign investment in the United States in 1990 to 10 percent of approximately $680 billion foreign-owned U.S. assets in 1997.

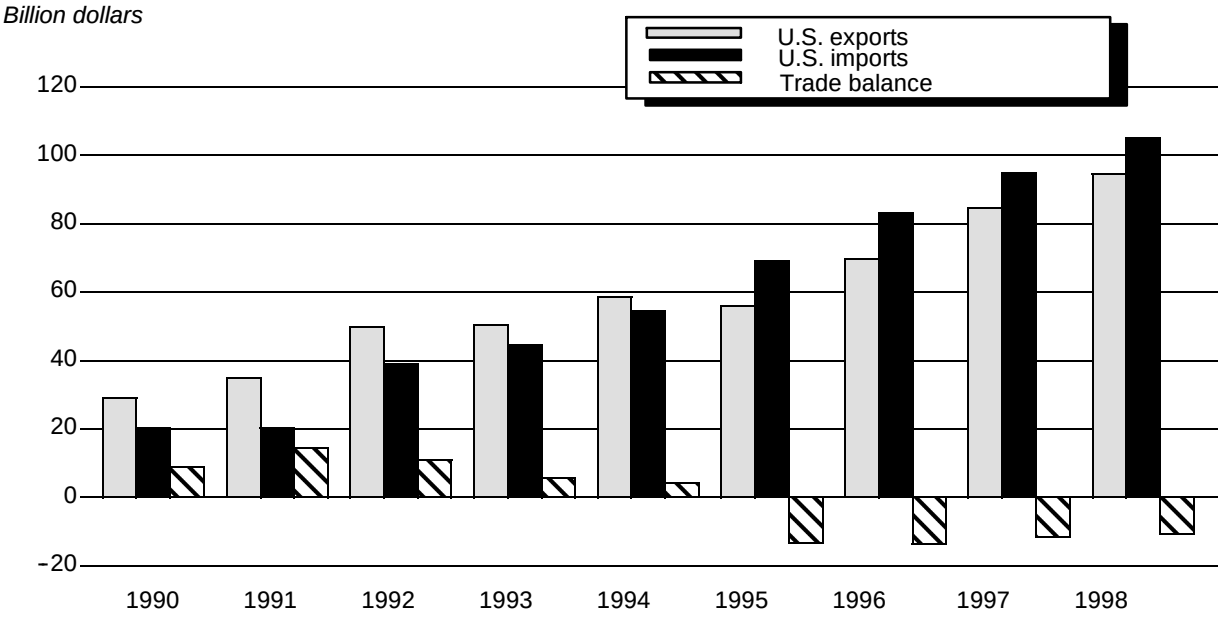
[5] The peso devaluation relative to the U.S. dollar made U.S. imports from Mexico relatively less expensive, increasing consumer purchases of Mexican products, and U.S. exports to Mexico relatively more expensive, reducing Mexican consumer purchases of U.S. products.

Table C-1
United States trade with Canada, Mexico, 1990-98

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998
					Billion dollars				
Exports:									
Total	418 .11	446.52	480.76	490.38	545.51	627.78	672.78	726.53	726.58
North America	114.41	121.21	137.76	146.19	171.04	179.42	198.77	229.53	242.52
Canada	85.22	86.34	88.00	95.94	112.62	123.57	129.32	145.99	148.17
Mexico	29.19	34.87	49.76	50.25	58.42	55.85	69.45	83.54	94.35
Imports:									
Total	510.91	500.60	555.14	621.59	692.27	780.89	830.82	899.11	940.21
North America	121.26	120.43	149.33	166.25	196.65	230.54	257.35	278.37	295.45
Canada	100.84	100.28	110.39	121.82	142.32	161.55	174.30	183.59	190.60
Mexico	20.42	20.15	38.94	44.43	54.33	68.99	83.05	94.78	104.85
Trade balance:									
Total	(92.80)	(4.08)	(74.38)	(131.21)	(153.11)	(146.76)	(158.04)	(172.58)	(213.63)
North America	(6.85)	0.78	(11.57)	(20.06)	(25.61)	(51.12)	(58.58)	(48.84)	(52.93)
Canada	(15.62)	(13.94)	(22.39)	(25.88)	(29.70)	(37.98)	(44.98)	(37.60)	(42.43)
Mexico	8.77	14.72	10.82	5.82	4.09	(13.14)	(13.60)	(11.24)	(10.50)

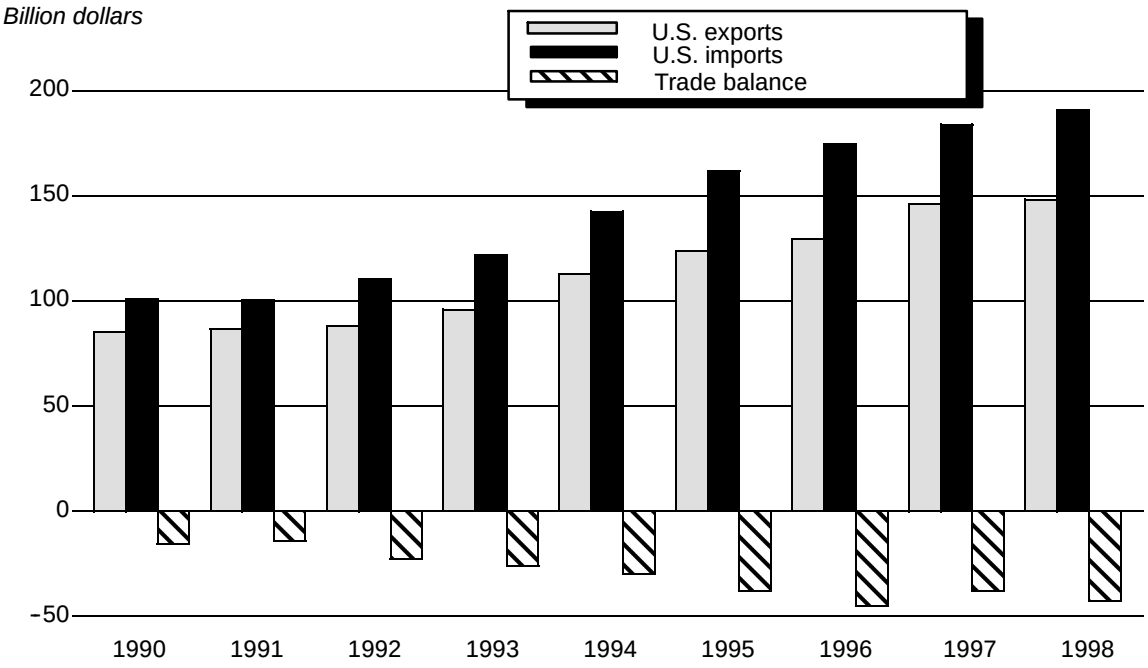
Source: Statistics Canada, *World Trade Analyzer*.

Figure C-1
U.S. trade in goods and services with Mexico, 1990-98



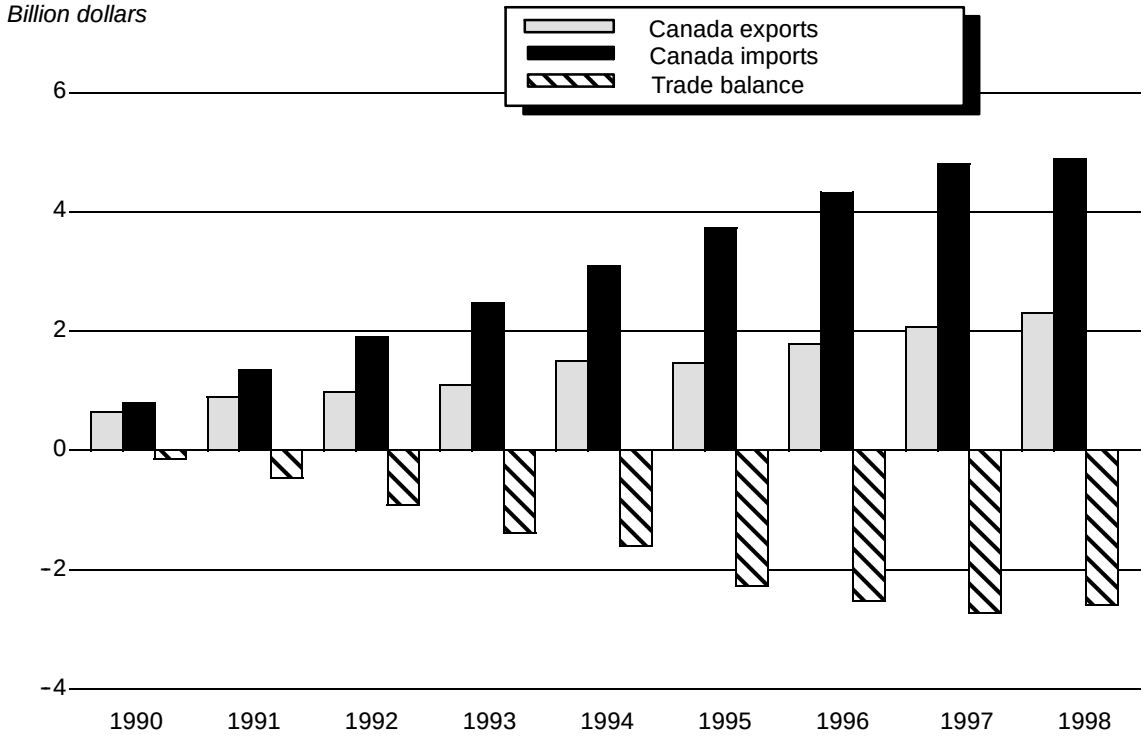
Source: Statistics Canada, World Trade Analyzer.

Figure C-2
U.S. trade in goods and services with Canada, 1990-98



Source: Statistics Canada, World Trade Analyzer.

Figure C-3
Canadian trade in goods and services with Mexico, 1990-98



Source: Statistics Canada, World Trade Analyzer.

The average[6] for U.S. investment outflows to NAFTA countries was $4.7 billion annually from 1990 through 1993, and $12.2 billion annually from 1994 through 1997. The annual average share of total U.S. outflows to NAFTA countries rose from 11 percent from 1990 through 1993, to 14 percent annually from 1994 through 1997 (table C-4). Investment inflows into the United States from NAFTA countries grew from an annual average of $2 billion between 1990 and 1993 to $7 billion between 1994 to 1997. World capital inflows (including NAFTA) into the United States grew from an annual average of $35.3 billion from 1990 through 1993, to $67.8 billion annually from 1994 through 1997. The share of NAFTA investor inflows as a percentage of world investor inflows rose from 6 percent annually during 1990 to 1993, up to a 10 percent share annually from 1994 through 1997.

Canada is the larger NAFTA investor in the United States. Canadian-owned U.S. assets account for over 95 percent of NAFTA partner investment, reaching nearly $100 billion in 1997. U.S. investment in Canadian assets has fluctuated between 80 percent and 87 percent (1990-97) of total U.S. NAFTA outward investment. U.S. investment in Mexican assets rose steadily from approximately $10 billion in 1990 to over $25 billion in 1997. Mexican investment in U.S. assets was less than 9 percent the value of U.S. investment in Mexican assets over the period 1990 to 1997.

Canadian investment in Mexican assets grew over 300 percent between 1990 and 1996. The rate of growth in Canadian-owned assets in Mexico was four times higher during the 1994 to 1997 period than in the 1991 to 1993 period. However, the United States continues to be the biggest investor in Mexico, accounting for approximately 64 percent of foreign-owned Mexican assets.

[6] Investment outflows and inflows fluctuate widely from year to year, reflecting large acquisitions or mergers in those particular years, therefore averages over several years are used to identify trends.

Table C-2
Canada and Mexico trade, 1990-98

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998
				Billion dollars					
Canada exports:									
Total	135.16	134.31	143.57	152.19	176.09	205.80	216.47	225.79	228.62
North America	101.49	101.17	111.38	122.92	143.82	163.01	176.09	185.66	192.91
Mexico	0.65	0.89	0.99	1.10	1.50	1.46	1.79	2.07	2.31
Canada imports:									
Total	122.65	124.43	127.05	135.95	154.90	170.58	176.67	200.07	203.12
North America	86.02	87.69	89.90	98.42	115.71	127.30	133.64	150.78	153.06
Mexico	0.80	1.35	1.90	2.48	3.09	3.73	4.32	4.79	4.89
Canada trade balance:									
Total	12.51	9.88	16.52	16.24	21.19	35.22	39.80	25.72	25.50
North America	15.47	13.48	21.48	24.50	28.11	35.71	42.45	34.88	39.85
Mexico	(0.15)	(0.46)	(0.91)	(1.38)	(1.59)	(2.27)	(2.53)	(2.72)	(2.58)
Mexico trade balance:									
Total	(10.51)	(19.42)	(17.81)	(14.48)	(15.79)	11.80	12.95	7.01	1.30
North America	(8.62)	(14.26)	(9.91)	(4.44)	(2.50)	15.41	16.13	13.96	13.08

Source: Statistics Canada, *World Trade Analyzer*.

Table C-3
United States investment stock, 1990-97

Country	1990	1991	1992	1993	1994	1995	1996	1997[1]
	Billon dollars							
Outward position:								
Total	430.1	467.8	502.1	564.3	640.3	717.6	777.2	860.7
North America	79.8	83.2	82.4	85.1	94.2	101.4	111.2	125.3
Canada	69.5	70.7	68.7	69.9	78.0	85.4	91.3	99.9
Mexico	10.3	12.5	13.7	15.2	16.2	16.0	19.9	25.4
EU	183.9	203.3	213.8	244.5	266.0	315.4	337.2	369.0
United Kingdom	72.7	79.8	85.2	109.2	121.3	122.8	122.7	138.8
Inward position:								
Total	394.9	419.1	423.1	467.4	480.7	535.6	594.1	681.7
North America	30.1	37.5	39.1	41.6	43.3	47.5	56.2	65.7
Canada	29.5	36.8	37.8	40.4	41.2	45.6	54.8	64.0
Mexico	0.6	0.7	1.3	1.2	2.1	1.9	1.4	1.7
EU	228.5	236.4	235.2	261.6	267.0	302.2	334.7	381.9
United Kingdom	98.7	100.1	90.9	98.7	98.7	116.3	121.3	129.6

[1] Preliminary.

Source: OECD, *International Direct Investment Statistics Yearbook*, 1998.

Table C-4
United States investment flows, 1990-97

Country	1990	1991	1992	1993	1994	1995	1996	1997[1]
	Billon dollars							
Outflows:								
Total	31.0	32.7	42.6	78.2	73.3	92.1	74.8	114.5
North America	5.8	3.6	3.4	6.1	10.5	11.5	10.0	16.6
Canada	3.9	1.3	2.1	3.6	6.0	8.6	7.3	10.7
Mexico	1.9	2.3	1.3	2.5	4.5	2.9	2.7	5.9
EU	4.3	18.0	15.4	38.2	31.2	48.8	32.4	52.9
United Kingdom	(0.2)	4.7	6.2	25.4	9.6	13.8	12.1	22.4
Inflows:								
Total	48.4	22.8	19.2	50.7	45.1	58.8	76.5	90.7
North America	2.0	0.3	2.0	3.7	5.7	4.5	8.2	9.5
Canada	1.8	0.1	1.3	3.8	4.6	4.8	8.2	9.4
Mexico	0.2	0.2	0.7	(0.1)	1.1	(0.3)	0.04	0.1
EU	21.9	11.5	6.6	36.8	24.6	35.1	48.1	50.3
United Kingdom	4.5	3.5	(1.1)	14.1	10.1	16.3	11.0	8.6

[1] Preliminary.

Source: OECD, *International Direct Investment Statistics Yearbook*, 1998.

APPENDIX D
Tariff and Nontariff Barriers to Trade

Introduction to Appendix D

Tariff and Nontariff Barriers to Trade

For purposes of this report, significant tariff barriers are those that meet or exceed the Uruguay Round peak tariff level of 15 percent ad valorem. Final Uruguay Round bound rates were used to determine tariff barriers between the UK and the United States and Canada. Final NAFTA rates were used for trade among the United States, Canada, and Mexico and the staged rates in the EU/Mexico Free Trade Agreement (FTA) were examined for these markets.[1] Because the EU/Mexico FTA will reduce all tariffs outside the agricultural sector to below 15 percent by 2001, only tariffs for agricultural products were reviewed. In some instances, tariffs below 15 percent were cited by industry representatives or government documents as barriers to trade.

Nontariff barriers, for purposes of this report, are impediments to trade identified by government or private sector organizations, and are not limited to those that are discriminatory. Information on these measures was gathered from interviews with U.S. industry representatives, fieldwork in the UK, TransAtlantic Business Dialogue documents, and U.S. and EU government documents.

The following tables provide information on specific barriers to trade among the United States, Canada, Mexico, and the UK. Information provided includes a description of the barrier and the products affected. The column labeled "Application" identifies the barrier as either universal-one that applies to all regardless of nationality or location-or selective–one that provides different treatment based on nationality or location. The source(s) of the information for each of the nontariff barriers is identified in the tables and may be abbreviated with the following codes:

CCG	FY2000 Country Commercial Guides, U.S. Department of State.
Ceei	*Market Access Study to Identify Trade Barriers Affecting the EU Textile Industry in Certain Third County Markets - Final Report*, Centre D' Etudes Economiques et Institionelles.
EIA	Energy Information Administration, U.S. Department of Energy.
FCC	U.S. Federal Communications Commission
GATS	General Agreement on Trade in Services documents.
Mkacc	The European Commission's *Market Access Database*.
MPAA	Motion Picture Association of America
NTE	Office of the United States Trade Representative's *2000 National Trade Estimate Report on Foreign Trade Barriers.*
Q	USITC questionnaire responses from industry representative.
TABD	TransAtlantic Business Dialogue, 2000 Midyear Report.
U.S. DOC	U.S Department of Commence.
WTO	World Trade Organization documents.

[1] The 1999 United Nations Conference on Trade and Development database was used for Mexican agricultural tariffs rather than final Uruguay Round bound rates, because of comparability problems with the tariff classifications in the EU/Mexico FTA.

Table D-1
EU/UK cross-sector nontariff barriers

Alleged barrier	Description	Source
Standards and labeling	EU barriers to trade include lags in the development of standards and the drafting of harmonized language; inconsistent application and interpretation by EU members of the legislation that is in place; overlap among directives dealing with specific product areas; grey areas between the scope of various directives; unclear marking and labeling requirements; and a tendency to rely on design-based rather than performance-based standards.	NTE
Testing and certification	The EU requires that certain regulated products be tested to certify that they meet the required performance criteria. Testing and certification may only be performed by "notified bodies" in the EU or a small number of laboratories in the United States that subcontract these procedures from the notified body but still need final approval from an EU firm. The small number of such labs limits market access.	NTE
Packaging	The European Commission proposed a directive establishing marking requirements for packaging indicating recyclability and/or reusability. The marking requirements differ from those of the United States creating additional costs and complications for both EU and U.S. firms.	NTE
Patents	Patent filing and maintenance fees in the EU and its member states are very expensive relative to other countries.	NTE

Table D-2
Canadian cross-sector nontariff barriers

Alleged barrier	Description	Source
Government procurement	Provincial government procurements have not been opened to competition under any agreement. Legally established preferences are given to small business and Canadian or provincial manufacturers, as well as on the basis of Canadian content, employment, investment, and export potential.	NTE; Mkacc
Intellectual property	For a large group of patents, Canada is in violation of the WTO Agreement on Trade-Related Aspects of Intellectual Property because it applies a term that is calculated as 17 years from issuance not 20 years from filing.	NTE; WTO
Labeling and marking requirements	Bilingual designation of the generic name on most prepackaged consumer products is required and the Province of Quebec requires that French be given equal prominence with other languages. Net quantity should be expressed in metric units.	CCG-Canada
Levies and charges	Canada imposes a Goods and Services Tax of 7% on nearly all goods and services.	Mkacc

Table D-3
Mexican cross-sector nontariff barriers

Alleged barrier	Description	Source
Conformity assessment	All imports subject to technical regulations face inspection at the border and again at the retail level, whereas domestic goods are subject only to spot inspections in the market.	NTE
Certification and Testing	Except for tires and some telecommunications equipment, Mexico requires product certification testing to be performed by a laboratory in Mexico. For some products there is a lack of test laboratories. Occasionally, the only accredited test laboratory is the laboratory of a competitor. Some manufacturers have concerns about the proprietary nature of the test results and are not willing to submit their products to competitors for a test.	NTE; CCG-Mexico
Customs procedures and practices	A number of procedures and practices impede trade including the lack of sufficient prior notification of procedural changes, inconsistent interpretation of regulatory requirements for imports at different border posts, long clearance times, high frequency of "random" checks, new requirements that particular goods may enter only through certain ports, and discriminatory and capricious enforcement of Mexican standards and labeling rules.	NTE; Mkacc
Customs law	Customs law is very strict regarding proper submission and preparation of customs documentation. Errors in paperwork can result in fines and even confiscation of merchandise as contraband.	CCG-Mexico
Intellectual property	Despite the promulgation of a new industrial property law in 1991 and a new copyright law in 1997, piracy is still a major problem in Mexico due to enforcement problems that may be in violation of TRIPs.	NTE; Mkacc; CCG-Mexico
Intellectual property	The principle of national treatment under Article 5 of the Berne Convention is being breached by the activities of collecting societies since Mexican right holders are charged 20% for the management of their rights and foreigners are charged 25%.	Mkacc
Intellectual property	A standard patent application is reported to take from 3 to 5 years from the date of filing.	Mkacc
Importer registration	All importers must be registered with the National Register of Importers, and importers of many products must also register with sector-specific registries. The registration procedures may take several months, which is particularly burdensome for small exporters.	Mkacc
Customs valuation	The customs value used for imports from Canada and the United States is determined on a f.o.b. basis whereas the customs value for all other imports is determined on a c.i.f. basis. This puts EU and other imports at a disadvantage vis-a-vis the United States and Canada.	Mkacc; WTO
Customs valuation	The government requires firms to post a bond that will cover the difference between the taxes and duties on the declared customs value and the government-set reference price. Exporters must produce original invoices, signed and notarized by their local Chamber of Commerce, to close the bond.	Mkacc

Table D-3—*Continued*
Mexican cross-sector nontariff barriers

Alleged barrier	Description	Source
Import licenses and permits	Items requiring import licenses account for up to 11% of imports and include crude oil; basic petrochemicals; some pharmaceuticals; automobiles; and used clothing, machinery, computer equipment, and transport equipment. Items such as arms and ammunition; explosives; pollutants; and corrosive, inflammable, or radioactive products require an import permit.	Mkacc
Government procurement	Mexican procurement agencies may have awarded contracts without providing the time period for tendering normally required under NAFTA.	NTE
Government procurement	The new law for Public Works and Related Services required procurement agencies to implement a new system of "Buy Mexico" purchasing preferences.	NTE
Labeling	The application of labeling requirements lacks transparency. The amount of detail, that labels must repeat identically in Spanish any other language in the label, and that labelling must occur prior to entry all increase costs unnecessarily.	Mkacc
Government procurement	Most purchases of goods and services by government and state-owned entities (SOEs) are awarded through public tenders which, for the most part, are only open to national suppliers and domestic goods. NAFTA allows U.S. and Canadian companies to participate in Federal Government tenders and those of Pemex, which accounts for one-third of the purchases by SOEs.	Mkacc
Patents	The patent application process is excessively long, taking from 3 to 5 years from the date of filing.	Mkacc
Standards	The Mexican Government generally recognizes international standards such as those issued by the ISO/IEC. These standards tend to favor European manufacturers over U.S. manufacturers.	CCG-Mexico

Table D-4
U.S. cross-sector nontariff barriers

Alleged barrier	Description	Source
Customs procedures	Invoice requirements for certain products are excessive and far exceed normal customs and declaration procedures. These effects are particularly disruptive to small and new exporters and in diversified, high value, and small quantity markets.	Mkacc
Customs procedures	U.S. Customs Service does not recognize the EC as a country of origin and refuses to accept EC certificates of origin. In order to justify EC country of origin status, EU firms are required to furnish supplementary documentation and follow additional procedures, which can be a source of added costs.	Mkacc
User fees	The United States imposes user fees on the arrival of merchandise, vessels, trucks, trains, private boats, and planes, as well as passengers. Excessive fees levied for customs, harbor, and other arrival facilities mainly used by importers, place foreign products at an unfair disadvantage vis-à-vis U.S. competition.	Mkacc
Standards	Products must conform to multiple technical regulations regarding consumer protection (including health and safety) and environmental protection. The complexity of U.S. regulatory systems can be an important structural impediment to market access. There are more than 2,700 State and municipal authorities in the U.S. which require particular safety certifications for products sold or installed within their jurisdictions. These requirements are not always uniform or consistent with each other, or transparent. In particular, individual States sometimes set environmental standards going far beyond what is provided for at the Federal level.	Mkacc
Government procurement	The Buy America Act governs procurement at the Federal and sub-Federal levels. It covers a number of discriminatory measures: some prohibit public sector bodies from purchasing goods and services from foreign sources; some establish local content requirements, while others extend preferential price terms to domestic suppliers. Buy America restrictions reduce the opportunities for EU exports, and discourage U.S. bidders from using European products or services.	Mkacc
Government procurement	Many procurements by the Department of Defense (DoD) fall under national security exceptions to open procurement obligations.	Mkacc
Government procurement	Management and operation (M&O) of research and development facilities under the Department of Energy, NASA, the National Science Foundation, or the DoD are often contracted to private companies and universities. M&O contracts do not follow the full and open competition procedures required under the Federal Acquisitions Regulations. Very few M&O contracts have been subject to competitive procedures and often the procurements done by these companies themselves follow Buy America requirements.	Mkacc
Government procurement	The Federal Government provides loans and grants, develops programs to encourage bids from small business, and sets aside certain procurement contracts totaling about 30% of all Federal procurement for small business. In this context, small businesses are defined as businesses located in the United States that make a significant contribution to the domestic economy through payment of taxes and/or use of U.S. products, materials, and/or labor and are not dominant.	Mkacc

Table D-4—*Continued*
U.S. cross-sector nontariff barriers

Alleged barrier	Description	Source
Government procurement	A complex set of rules and practices results in domestic sources restrictions in defense procurement. Some goods must be produced on U.S. soil, funding for testing foreign products has been reduced, foreign content in U.S. exports is limited, and foreign nationals rarely have the required security clearances to attend pre-contract award conferences.	Mkacc
Intellectual property	Imported products alleged to infringe U.S. patent rules are treated less favorably than like products of U.S. origin. This appears to be in violation of Article III of the GATT.	Mkacc; WTO
Intellectual property	The first-to-invent patent system applies only in the United States and creates obstacles and indirect costs.	Mkacc
Intellectual property	The EU claims the registration or renewal in the United States of a trademark previously abandoned by an owner whose business was confiscated under Cuban law is not permitted.	WTO
Tax treatment	Foreign Sales Corporations are able to exempt certain income earned by a foreign subsidiary of a U.S. corporation from U.S. tax. A WTO panel and Appellate Body found that this measure constituted a prohibited subsidy under the Agreement on Subsidies and Countervailing Measures and the Agriculture Agreement.	Mkacc; NTE

Table D-5
Agricultural products: EU/UK nontariff barriers

Affected products	Application	Alleged barrier	Source
Biotechnology products	Universal	Approval process is lengthy and unpredictable; several EU members have banned genetically modified organisms (GMO) or suspended approvals.	NTE
Processed foods and food ingredients	Universal	Food or ingredients that may contain GMOs, even as a result of accidental commingling must be labeled as such. As a result, food processors have switched to non-U.S. sources to avoid the GMO label.	NTE
Peanuts, tree nuts, dried fruits, cereals, and milk	Universal	Maximum allowable levels of aflatoxin are too low and required sampling methods increase handling costs.	NTE
Wide range of agricultural products	Selective	Export subsidies are applied to products such as wheat, beef, dairy, poultry, certain fruits, and some manufactured goods such as pasta.	NTE
Agricultural products and foodstuffs	Selective	The EU Regulation on “Protection of Geographical Indications and Designations of Origin for Agricultural Products and Foodstuffs” does not achieve a balance between protection for legitimate trademarks and legitimate geographical indicators.Certain generic terms applied to wine are granted trademark protection.The EU does not provide national treatment to trademarks and geographical indications.	NTE; WTO
Bananas	Selective	The EU maintains import policies that favor imports from certain countries. A WTO panel and Appellate Body found these policies to be inconsistent with GATT 1994.	NTE; WTO
Peaches and pears	Selective	Price supports for fresh peaches and pears in the EU disadvantage non-EU producers.	NTE
Wine	Selective	The EU grants certain temporary derogations for winemaking regulations to U.S. producers. Without these derogations or EU acceptance of U.S. winemaking practices, the majority of U.S. wines would be banned.	NTE
Cereals	Selective	EU regulations impose a duty based on reference prices rather than transaction values.	WTO; NTE
Certain agricultural chemicals products	Universal	EU protection of inventions in this area consists of a patent term extension scheme.	WTO
Beef	Universal	Beef produced with growth promoters (hormones) is banned. A WTO panel and Appellate Body found that the prohibition was inconsistent with the Sanitary and Phytosanitary Agreement.	NTE; WTO
Poultry	Universal	Poultry produced using anti-microbial treatments is banned.	NTE

Table D-5—*Continued*
Agricultural products: EU/UK nontariff barriers

Affected products	Application	Alleged barrier	Source
Certain parts of cattle, sheep, and goats	Universal	Specified risk materials (SRMs) used in food, feed, medical, pharmaceutical, cosmetic, and other industrial products are banned.	NTE; TABD 5/2000
Animal products	Selective	Establishments exporting to the EU must undergo a lengthy approval process. The problem has been particularly acute in the dairy industry.	NTE
Cheese	Selective	The EU subsidizes dairy products used in the production of cheese for export.	NTE; WTO
Biotechnology products	Universal	The EU approval process is lengthy and unpredictable.	NTE
Biotechnology products	Universal	The European Council's "Directive on Legal Protection of Biotechnological Inventions" excludes plant and animal varieties from patentability and does not provide the same level of patent protection that is provided in United States. Further, it is not binding on the European patent office.	NTE; WTO
Gelatin	Universal	Some of the provisions of the EU directive regulating the production of gelatin are overly restrictive.	NTE

Table D-6
Agricultural products: EU/UK tariff barriers

Affected products	Comment	WTO bound range
Live animals	Live ducks, geese, guinea fowl, and turkeys.	32.30-34.50 ECU/100kg
Meat and edible meat offal	Beef and veal, sheep and goat meat, meat of certain other animals, including edible offal, flours, and meal.	15.4%; 12.8%-15.4% plus 90.20-304.30ECU/ 100kg
Meat and edible meat offal	Chickens, turkeys, ducks, geese, guinea fowl, whole or parts.	18.70-123.20 ECU/100kg
Meat and edible meat offal	Pig fat	12.90-23.60ECU/100 kg
Meat and edible meat offal	Poultry fat	41.50 ECU/100kg
Meat and edible meat offal	Pork, salted, in brine or smoked.	15.4%; 46.70-151.10 ECU/kg
Fish	Live saltwater fish, including sharks, halibut, and sea bream; fresh, chilled, or frozen fish, including halibut, megrim, sole, anchovies, bream, hake, monkfish, swordfish, sea bass, sturgeon, red snapper, and others; dried, salted, or smoked halibut.	15%-16%
Fish	Fresh, chilled, or frozen tuna, skipjack or bonito.	20%-22%
Fish	Fresh, chilled, or frozen sardines and mackerel; fillets including frozen and dried and other fish meat of Pollachius virens, Sebastes, Gadus morhua, haddock, mackerel, and others.	15%-23%
Crustaceans	Lobsters (Homarus) other than whole; shrimps of the genus Crangon.	16%-18%
Dairy products	Milk and cream; powdered, concentrated, or condensed milk and cream not containing added sweetener; buttermilk, curdled milk and cream, yogurt and other fermented or acidified milk with no added sweetener, cocoa, or fruit.	12.90-183.70 ECU/100kg
Dairy products	Powdered, concentrated, or condensed milk and cream; buttermilk, curdled milk and cream, yogurt and other fermented or acidified milk; and whey containing added sweetener.	17-1.62 ECU/kg plus 9.50-27.500 ECU/100kg
Dairy products	Buttermilk, curdled milk and cream, yogurt and other fermented or acidified milk with added fruit or cocoa.	8.3% plus 17.10-168.80 ECU/100kg
Dairy products	Butter; certain dairy spreads.	189.60-231.30 ECU/100kg
Dairy products	Whey cheese, grated cheese, processed cheese, blue-veined cheese, other cheeses.	140.90-221.20 ECU/100kg
Birds' eggs, fresh, preserved, cooked, or dried		30.40-142.30 ECU/100kg

Table D-6—*Continued*
Agricultural products: EU/UK tariff barriers

Affected products	Comment	WTO bound range
Natural honey		17.3%
Edible vegetables	Tomatoes, cucumbers, globe artichokes, courgettes, and olives.	10.4%-16% plus 15.20-37.80 ECU/Tonne; 15.2%
Edible vegetables	Sweet corn	5.1% plus 9.40 ECU/100kg
Edible vegetables	Mushrooms (Agaricus)	9.6% plus 191 ECU/100kg
Edible vegetables	Fresh or dried manioc and arrowroot.	9.50 ECU/100kg
Edible fruit and nuts	Plantains, oranges, mandarins, tangerines, satsumas, grapes, apples, pears, cherries, peaches, nectarines, plums.	16%-20%; 10.4%-20% plus 7.10-27.40 ECU/100kg
Edible fruit and nuts	Frozen fruit and nuts containing added sweetener including strawberries, raspberries, blackberries, currents, loganberries, and mulberries, and other edible fruit and nuts, except tropical products.	20.8%; 20.8% plus .84/100kg
Cereals	Durum wheat, common wheat, rye, oats, corn, rice, barley, triticale, and grain sorghum, except for sowing.	93.00-416.00 ECU/Tonne
Milled products	Wheat, meslin, corn, barley, oat, or rice flour, groats, meal, pellets, or otherwise worked; malt.	75.00-267.00 ECU/Tonne
Starches	Wheat, corn, potato, rice, arrowroot, and other types.	166.00-224.00 ECU/Tonne
Inulin		19.8%
Wheat gluten		512.00 ECU/Tonne
Sugar beets, fresh, dried, or powdered		67.00-230.00 ECU/Tonne
Pectic substances, pectinates, and pectates		19.2%
Animal or vegetable fats and oils	Pig fat	17.20 ECU/100kg
Animal or vegetable fats and oils	Olive oils and their fractions.	124.50-160.30 ECU/100kg
Animal or vegetable fats and oils	Margarine containing 10%-15% butterfat; artificial mixtures of animal or vegetable fats or oils.	8.3% plus 28.40 ECU/100kg; 16%

Table D-6—*Continued*
Agricultural products: EU/UK tariff barriers

Affected products	Comment	WTO bound range
Preparations of meat	Sausages of meat or meat offal or preparations containing sausages; homogenized prepared or preserved meat or livers of bovine animals, sheep, goats, and swine; prepared or preserved meat of bovine animals (including corned beef and tongue), sheep, goats, swine, reindeer including preparations of the blood of any animal.	15.4%-16.6%; 1494.00-1005.00 ECU/Tonne
Preparations of meat	Prepared or preserved uncooked poultry.	86.70 ECU/100kg
Preparations of meat	Prepared or preserved hams, shoulders, loins, collars, and parts of swine meat, including mixtures.	54.30-156.80 ECU/100kg
Preparations of meat	Prepared or preserved bovine or goat meat, including mixtures.	16.6%; 303.40 ECU/100kg
Preparations of fish, molluscs, or crustaceans	Clam juice; frozen raw fillets coated with batter or breadcrumbs; prepared or preserved cod, coalfish, hake, pollack, lamprey, surimi, caviar and caviar substitutes, shrimps and prawns, lobster, snails, and scallops.	15%-20%
Preparations of fish, molluscs, or crustaceans	Prepared or preserved tuna, skipjack, bonito, mackerel, sardines, anchovies, and certain aquatic invertebrates.	24%-26%
Sugars	Cane or beet sugar and chemically pure sucrose; isoglucose; glucose and glucose syrup; maltodextrine and maltodextrine syrup; caramel; mixtures of sugars.	200.00-507.00 ECU/Tonne
Sugars	Chemically pure fructose.	16% plus 507.00 ECU/Tonne
Sugar confectionary	Chewing gum	6.2%-6.3% plus 27.10-30.90 ECU/100kg (max. 18.2%)
Sugar confectionary	White chocolate	9.1% plus 45.10 ECU/100kg (max. 18.9%) plus16.50 ECU/100kg
Sugar confectionary	Confections or sweetmeats, cough drops, toffees, caramels, and jelly confectionary.	9% on agricultural component (max. 18.7%) plus 16.50 ECU/100kg

Table D-6—*Continued*
Agricultural products: EU/UK tariff barriers

Affected products	Comment	WTO bound range
Cocoa and cocoa preparations	Chocolate and other food preparations containing cocoa.	8% plus 25.20-41.90 ECU/100kg; 15.4% plus duty on agricultural component; 8.3% plus duty on agricultural component (max. 18.7%) plus duty on sugar
Preparations of cereals, flour, starch, or milk	Preparations for infant use; mixes and doughs for the preparation of bakers' wares.	7.6% plus duty on agricultural component
Preparations of cereals, flour, starch, or milk	Uncooked pasta, couscous.	6.4%-8.3% plus 9.7-27.60 ECU/100kg
Preparations of cereals, flour, starch, or milk	Tapioca and substitutes; foods prepared by swelling or roasting cereal products.	5.1%-8.3% plus 15.10-46.00 ECU/100kg;
Preparations of cereals, flour, starch, or milk	Breads, pastry, cakes, biscuits, and other bakers' wares.	4.5%-10.1% plus 130.00-605.00 ECU/Tonne; 9% plus duty on agricultural component (max. 20.7%-24.2%) plus duty on sugar or flour; 9.7% plus duty on agricultural component
Preparations of vegetables, fruit, and nuts	Cucumbers, gherkins, onions, mushrooms. and other vegetables fruits and nuts prepared or preserved by vinegar.	16%-17.6%
Preparations of vegetables, fruit, and nuts	Mushrooms, potatoes, sauerkraut, capers, olives, peas, beans, and other vegetables fruits and nuts prepared or preserved other than by vinegar, including frozen.	16%-19.2%; 18.4% plus 191.00-222.00 ECU/100kg; 7.6% plus duty on agricultural component

Table D-6—*Continued*
Agricultural products: EU/UK tariff barriers

Affected products	Comment	WTO bound range
Preparations of vegetables, fruit, and nuts	Vegetables, fruit, and nuts preserved by sugar.	20%; 20% plus 23.90 ECU/100kg
Preparations of vegetables, fruit, and nuts	Jams, fruit jellies, marmalades, and fruit or nut pastes.	15%-24%; 20%-24% plus 4.20-23.00 ECU/100kg
Preparations of vegetables, fruit, and nuts	Prepared or preserved fruit, nuts, and other plants including citrus, apples, bananas, dates plums, apricots, cherries, peaches, and pineapples.	15.2%-25.6%; 16%-25.6% plus 25.00-42.00 ECU/Tonne
Preparations of fruit	Fruit juice including orange, grapefruit, lime, cherry, pineapple tomato, apple, and other types.	15.2%-33.6%; 10.5%-33.6% plus 12.90-20.60 ECU/100kg;
Preparations of fruit	Grape juice	22.4%-40% plus 27.00-131.00 ECU/hlt plus 206.00 ECU/Tonne
Miscellaneous edible preparations	Coffee extract; roasted chicory and other roasted coffee substitute extract.	6.5%-9% plus duty on agricultural component; 5.1%-10.8% plus 12.70-22.70 ECU/100kg
Miscellaneous edible preparations	Yeast	12% plus 145.00-492.00 ECU/Tonne
Miscellaneous edible preparations	Ice cream and other edible ice.	7.9%-8.6% plus 202.00-540.00 ECU/Tonne (max. 18%-19.4%) plus 69.00-94.00 ECU/Tonne
Miscellaneous edible preparations	Preparations containing milk.	9% plus duty on agricultural component
Beverages	Nonalcoholic beverages containing milk.	5.4%-6.4% plus 121.00-212.00 ECU/Tonne
Beverages	Sparkling wine	32.00 ECU/100lt
Beverages	Higher value rum; grape must.	27.7%-34.7%

Table D-6—*Continued*
Agricultural products: EU/UK tariff barriers

Affected products	Comment	WTO bound range
Residues and wastes from the food industries	Bran, sharps, and other residues from cereals or leguminous plants.	44.00-320.00 ECU/Tonne
Animal feed		102.00-948.00 ECU/Tonne
Tobacco and manufactured tobacco substitutes	Unmanufactured tobacco	18.4% (min. 22.00 ECU/100kg; max. 24.00ECU/100kg)
Tobacco and manufactured tobacco substitutes	Cigars, cheroots, cigarillos, and cigarettes.	26%-57.6%
Tobacco and manufactured tobacco substitutes	Smoking tobacco and other manufactured tobacco and tobacco substitutes.	16.6%-74.9%

Table D-7
Agricultural products: Canadian nontariff barriers

Affected products	Application	Alleged barrier	Source
Animals and plant and animal products	Universal	Inspection and labeling regulations are inconsistent among Provinces.	Mkacc
Live animals	Selective	The import of some game birds is prohibited.	CCG-Canada
Wheat, barley, and their products	Selective	Imports from Mexico and the United States are counted against within quota amounts, thus limiting imports from other countries at the lower within quota rate.	Mkacc
Wheat	Selective	The Canadian Wheat Board is a government-sanctioned monopoly and as such is granted privileges that restrict competition and distort trade.	NTE
Cigarettes	Selective	Imports are prohibited.	Mkacc
Beef and veal	Selective	The tariff rate quota system limits imports from non-North American countries to less than their within quota limit.	Mkacc
Poultry and dairy products	Selective	Products are subject to import control and receive support programs. A WTO panel and Appellate Body found Canada to be in violation of the Agreement on Agriculture with respect to subsidies.	Mkacc; WTO
Dairy products, eggs, and poultry	Selective	Canada closely restricts imports of “supply managed” products by quota.	NTE
Alcoholic beverages and tobacco products	Universal	Excise taxes are levied on these products	Mkacc
Butter	Selective	The Canadian Dairy Association has a monopoly on dairy imports.	Mkacc
Fish	Selective	Only Canadians or Canadian-controlled firms may obtain fishing licenses.	Mkacc; CCG-Canada
Horticultural products	Selective	International and interprovincial trade in bulk horticultural products is restricted.	Mkacc; NTE
Sugar	Selective	Canada imposed a countervailing duty of ECU 50.79 per 100Kg on EU sugar.	Mkacc
Fresh fruit and vegetables	Selective	Imports of fresh fruit and vegetables without a pre-arranged buyer are prohibited.	Mkacc
Fish	Selective	All exporters whose products are found not to comply with Canadian sanitary requirements are placed on the Mandatory Inspection list published by the Fisheries and Oceans Canada and are thereafter subject to inspection at importation.	Mkacc
Alcoholic beverages	Universal	Wine, spirit, and beer containers are subject to an environmental levy in Ontario.	Mkacc

Table D-7—*Continued*
Agricultural products: Canadian nontariff barriers

Affected products	Application	Alleged barrier	Source
Alcoholic beverages	Universal	Provincial liquor boards control retail pricing, listing, and distribution and sales in most Provinces.	Mkacc; NTE; CCG-Canada
Alcoholic beverages	Universal	Private retailing is not permitted in Ontario.	Mkacc
Alcoholic beverages	Selective	Ontario requires wine manufacturers using imported grapes buy a specified amount of Ontario grapes. This results in a 25% local content requirement.	Mkacc
Alcoholic beverages	Selective	In several Provinces imported beer is subject to price markups not applied to domestic beer.	Mkacc; NTE
Alcoholic beverages	Selective	In order to export to Canada an exporter must first obtain a listing of the brand approved by the liquor board in each Province in which the product is to be sold.	Mkacc
Dairy products	Universal	The Province of Quebec applies coloring restrictions on dairy margarine and butter/margarine blends. Provincial marketing restrictions on butter/margarine blends or imitation dairy products have limited or prohibited sales in many Provinces.	Mkacc; NTE

Table D-8
Agricultural products: Canadian tariff barriers

Affected products	Comment	WTO bound range
Live plants, bulbs, and cut flowers	Fresh cut cymbidium	16%
Edible vegetables	Certain fresh or chilled vegetables, including lettuce, legumes; uncooked or steamed asparagus.	Not less than 17.1%; 19.1%
Preparations of vegetables, fruit, and nuts	Prepared or preserved mushrooms, baby carrots, Brussels sprouts, broccoli, and cauliflower, not in vinegar or acetic acid.	15.5%-17%
Beverages	Grape must	C$1.10-C$1.41/lt plus 15%-19.2%
Beverages	Vermouth and other wine with an alcoholic strength exceeding 18.3%.	16%

Table D-9
Agricultural products: Mexican nontariff barriers

Affected products	Application	Alleged barrier	Source
Agricultural products	Selective	Mexico's import inspection and clearance procedures are long, burdensome, nontransparent, and unreliable.	Mkacc; NTE
Edible dry beans	Selective	Mexico's administration of its tariff-rate quota obligations resulted in quotas going unfilled. This may apply to other products as well.	Mkacc; NTE
Certain distilled spirits, cigarettes, and apples	Selective	The government requires firms to post a bond that will cover the difference between the taxes and duties on the declared customs value and the government-set reference price. Exporters must produce original invoices, signed and notarized by their local Chamber of Commerce, to close the bond.	NTE; Q; CCG-Mexico
Cornflour and corn tortillas	Universal	Mexico applies price controls to these products.	Mkacc
Hogs for slaughter, cattle, beef, and beef offal	Selective	Actions taken by Mexican antidumping authorities may be in violation of the WTO Antidumping Agreement.	NTE
High fructose corn syrup	Selective	A WTO panel found that Mexico's application of antidumping measures violated the Antidumping Agreement.	NTE
Live fish and certain plant preparations	Selective	Imports of live predatory fish, cannabis indica, and preparations of opium and cannabis indica are prohibited for reasons of public safety, health, or morality.	Mkacc
Certain agricultural products	Selective	Mexico's sanitary and phytosanitary standards have created barriers to exports of certain agricultural goods including grains, seed products, potatoes, apples, stone fruit, meat, poultry, citrus from Florida, and table eggs.	NTE

Table D-10
Agricultural products: Mexican tariff barriers

Affected products	Comment	1999 Tariff
Live animals	Bovines, swine, and chickens	18%-23%
Meat and edible meat offal	Fresh, chilled, or frozen meat of bovine animals, swine, and bovine offal	20%-25%
Meat and edible meat offal	Fresh, chilled, or frozen chicken, ducks, geese, and guinea fowl	240%
Meat and edible meat offal	Fresh, chilled, or frozen turkey	123%-240%
Meat and edible meat offal	Pig and poultry fat	260%
Fish and crustaceans	Fresh, chilled, or frozen tuna, skipjack, bonito, sardines, and certain other fish, including fillets; frozen mackerel, sea bass, and dogfish; lobster, shrimp, and prawns.	20%-30%
Dairy products	Concentrated milk and cream; yogurt and other fermented or acidified milk and cream; butter and dairy spreads; cheese and curd.	20%-128%
Bird's eggs, fresh, preserved, or cooked		20%-46%
Edible vegetables	Fresh, chilled, or dried potatoes	18%-23%
Edible vegetables	Kidney beans, including white pea beans	128%
Edible fruit and nuts, fresh or dried	Bananas and plantains; apples, pears, and quinces; apricots, cherries, peaches, nectarines, plums, and sloes; dried apricots and prunes; mixtures of dried fruit or nuts.	23%
Peel of citrus fruit or melons		18%
Coffee	Roasted coffee and coffee substitutes	72%
Coffee	Unroasted decaffeinated coffee	23%
Cereals	Wheat and meslin, barley, and corn	67%-198%
Cereals	Rice, sorgum and certain other grains	15%-20%
Milled products	Cereal flours, groats, meal, and pellets; flour, meal, powder, flakes, granules, and pellets of potatoes and legumes; starches, inulin, and wheat gluten.	15%
Milled products	Malt	161%
Oil seeds and oleaginous fruits	Soybeans; flours and meals of oil seeds and oleaginous fruits.	15%

Table D-10—*Continued*
Agricultural products: Mexican tariff barriers

Affected products	Comment	1999 Tariff
Animal or vegetable fats and oils	Refined soybean, peanut, palm, sunflower, safflower, coconut, corn, rapeseed, colza, or mustard oil; olive oil other than virgin; margarine; edible mixtures or preparations of animal or vegetable fats or oils.	20%
Animal or vegetable fats and oils	Animal fats and oils and their fractions, partially or wholly hydrogenated.	260%
Preparations of meat	Prepared or preserved meat, meat offal, or blood, including sausages and food preparations based on these products.	18%-23%
Preparations of fish, molluscs, or crustaceans	Prepared or preserved sardines, tuna, skipjack, bonito, and certain other fish.	23%
Sugars	Chemically pure lactose, maltose, glucose, and fructose in solid form; sugar syrups.	18%
Cocoa and cocoa preparations	All except whole or broken cocoa beans, cocoa powder containing more than 90% sugar, preparations not in bulk form, and those containing certain proportion of milk or cream.	18%-23%
Preparations of cereals, flour, starch, or milk	Uncooked pasta containing eggs.	20%
Preparations of vegetables, fruit, and nuts	Dried tomatoes, tomato paste and puree, and other prepared and preserved tomatoes; prepared or preserved potatoes and peaches; homogenized composite food preparations; citrus paste and purees; marmalades; grape juice.	20%-23%
Miscellaneous edible preparations	Coffee extract, essence, and concentrate and preparations with a basis of such products.	141%
Miscellaneous edible preparations	Tea or mate extract, essence, and concentrate and preparations with a basis of such products; roasted chicory and other roasted coffee substitutes.	23%
Miscellaneous edible preparations	Prepared baking powders; ice cream and other edible ice; protein concentrates and textured protein; other preparations containing milk, alcohol; certain butter substitutes and syrups derived from cane or beet sugar.	18%-23%
Beverages	Waters, including mineral waters, with or without added sugar; other nonalcoholic beverages.	20%-30%
Beverages	Wine, including sparking wine, valued less than $5/lt; vermouth and other wine of fresh grapes; other fermented beverages and mixtures; spirits from distilled grape wine or grape marc; rum and tafia; vodka; vinegar and substitutes obtained from acetic acid.	20%-30%

Table D-10—*Continued*
Agricultural products: Mexican tariff barriers

Affected products	Comment	1999 Tariff
Residues and wastes from the food industries	Flour, or meal from meat, unfit for human consumption; residue of starch manufacture; oilcake and other solid residues; animal feed.	18%-23%
Tobacco and manufactured tobacco substitutes	Cigarettes containing tobacco	67%

Table D-11
Agricultural products: U.S. nontariff barriers

Affected products	Application	Alleged barrier	Source
Nonmanufactured agricultural products	Selective	For new products, the sanitary and phytosanitary requirements to obtain import permits entail a lengthy approval process.	Mkacc
Wide range of agricultural products	Selective	The Export Enhancement Program provides subsidies to U.S. exporters competing with foreign subsidized exports.	Mkacc
Wide range of agricultural products	Selective	The Market Access Program subsidizes promotion campaigns for agricultural products.	Mkacc
Wide range of agricultural products	Selective	U.S. government guarantees private bank loans to selected countries for the purchase of certain products.	Mkacc
Wide range of agricultural products	Selective	The Emerging Markets Program provides technical assistance to promote exports.	Mkacc
Wine	Universal	Wine labeling procedures at the Federal and State levels are time-consuming, confusing, and costly.	Mkacc
Wine	Universal	The Bureau of Alcohol, Tobacco, and Firearms (BATF) has not included many wine appellations of origin and geographical indications on its list of "Foreign Non-generic Names of Geographical Significance Used in the Designation of Wines" and thus they are not given sufficient protection.	Mkacc
Alcoholic beverages	Universal	U.S. regulations allow some EU geographical denominations to be used to designate products of U.S. origin. This measure is permitted by BATF and likely to constitute a violation of TRIPS.	Mkacc
Tobacco	Selective	The methods used to manage quotas are more restrictive than is necessary.	Mkacc
Tuna	Selective	The U.S. embargoes tuna from countries alleged to cause unacceptable levels of dolphin mortality or that fail to certify the origin of tuna exports.	Mkacc
Fish	Selective	The U.S. may embargo fish from countries whose nationals engage in large-scale drift net fishing.	Mkacc
Fish	Selective	Vessels must be at least 75% U.S.-owned to be considered U.S.-owned. Fishing in U.S. waters by foreign vessels is unduly restricted.	Mkacc
Canned peaches	Selective	FDA controls for the detection of pit fragments are time consuming and have led to detention, destruction, or obligatory re-export.	Mkacc

Table D-11—*Continued*
Agricultural products: U.S. nontariff barriers

Affected products	Application	Alleged barrier	Source
Apples and pears	Selective	U.S. pre-clearance inspections to guarantee shipments free of pests are nonscientific and contrary to the spirit of transparency because the list includes unspecified pests.	Mkacc
Fruit and vegetables	Selective	Imports from pathogen-free regions are prohibited if certain pathogens are found elsewhere in the country.	Mkacc
Citrus fruits	Selective	Imports are restricted to North Atlantic ports, necessitating costly land transport to other parts of the United States.	Mkacc
Plants in growing media	Selective	The mandatory requirement for a 2-year quarantine on an importer's premises is excessive. Some of the species involved have a shorter growth cycle than the waiting period required by USDA.	Mkacc
Rhododendrons	Selective	Certain phytosanitary requirements under the Endangered Species Act are excessive.	Mkacc
Ruminant animals	Selective	Rules concerning bovine spongiform encephalopathy (mad cow disease) that govern imports are not scientifically based and are discriminatory.	Mkacc
Goats	Selective	Health restrictions regarding the risk of scrapie are not justified.	Mkacc
Animals and animal products	Selective	The U.S. applies import restrictions for disease status based on national rather than regional considerations.	Mkacc
Live animals	Selective	The U.S. does not recognize the EU's freedom from certain diseases.	Mkacc
Meat and meat products	Selective	U.S. restrictions on the commingling of meat from two countries are more onerous than those agreed upon in the U.S.-EU Agreement on Application of the Third Country Meat Directive.	Mkacc
Uncooked meat products	Selective	With few exceptions, the U.S. bans the importation of uncooked meat products (e.g.,sausage, ham, bacon).	Mkacc
Egg products	Selective	Imports are allowed only where the production process can be subject to continuous inspection.	Mkacc
Dairy products	Selective	The management of the quota system is not as transparent, comprehensible, and accessible as it should be.	Mkacc
Dairy products	Selective	Imports of dairy products made from unpasteurized milk and certain fresh dairy products such as yogurts are prohibited.	Mkacc
Dairy products	Selective	The U.S. provides assistance for market development.	Mkacc

Table D-11—*Continued*
Agricultural products: U.S. nontariff barriers

Affected products	Application	Alleged barrier	Source
Certain sugar syrups	Selective	Canada claims the proposed reclassification of certain sugar syrups by the U.S. Customs Service may be in violation of the Agreement on Agriculture and GATT 1994.	WTO
Poultry and poultry products	Selective	The U.S. Dept. of Agriculture's Food Safety Inspection Service bans the imports of these items from the EU.	WTO
Cattle, swine, and grain	Selective	South Dakota and other states prohibit entry or transit to Canadian trucks carrying these items.	WTO
Pasta	Selective	The U.S. imposed antidumping and countervailing duties on Italian pasta that the EU considers to be in violation of the U.S.-EC Pasta Settlement of 1987.	Mkacc
Wheat gluten	Selective	The U.S. has imposed a quota on imports of wheat gluten from the EU that the EU considers to be in violation of the WTO Agreements.	Mkacc; WTO
Food products	Universal	The U.S. Nutrition Labeling and Education Act of 1990, which requires certain products to be labeled regarding their content differs from international standards on labeling established by the Codex Alimentarius.	Mkacc
Certain canned food	Selective	The import of "Low Acid Canned Food," such as fisheries products or dairy products, is subject to a detailed prior approval system and makes no provision for accepting such products product under equivalent hygiene conditions.	Mkacc

Table D-12
Agricultural products: U.S. tariff barriers

Affected products	Comment	WTO bound range
Meat and edible meat offal	Fresh, chilled, or frozen poultry	$15.00-$17.60/100 kg
Dairy products	Milk and cream, including powder, sour cream	$6.80-$17.50/100kg
Dairy products	Yogurt; fermented milk; blue-veined, cheddar, colby, edam, gouda, romano, reggiano, parmesan, provolone, provoletti, sbrinz, and goya cheese from cow's milk.	17%-25%
Edible vegetables	Fresh or chilled asparagus, mushrooms, spinach, okra, sweet corn, and certain other vegetables.	20%-21.3%; $8.80/100kg plus 20%
Edible vegetables	Dried onions and garlic	21.3%-29.8%
Edible fruit and nuts	Chopped dates; fresh cantaloupes, watermelons, and certain other melons.	28%-29.8%
Vegetable plaiting materials	Broomcorn	$4.95/ton
Animal or vegetable fats and oils	Soybean oil; margarine containing at least 5% soybean oil.	18%-19.1%
Preparations of cereals, flour, starch, or milk	Preparations containing milk for infant use; certain other dairy product preparations.	16%-17.5%
Preparations of fruit, vegetables, and nuts	Fruit-peel other than citrus and mixtures of fruit, nuts, fruit-peel, and other parts of plants, preserved by sugar; prepared or preserved pears, peaches.	15.3%-17%
Preparations of fruit, vegetables, and nuts	Certain nuts (not peanuts, pecans, almonds, pistachios) prepared or preserved; prepared or preserved dates and nectarines.	17.9%-22.4%
Preparations of fruit, vegetables, and nuts	Prepared or preserved apricots, except pulp.	29.8%
Preparations of fruit, vegetables, and nuts	Frozen orange juice; concentrated citrus juice of any single fruit other than orange, grapefruit, or lime, whether or not fortified with vitamins or minerals.	$.0758-$.079/lt
Miscellaneous edible preparations	Ice cream and similar dairy products.	17%-20%
Fish	Sturgeon roe; canned sardines and tuna in oil; caviar	15% -35%

Table D-12—*Continued*
Agricultural products: U.S. tariff barriers

Affected products	Comment	WTO bound range
Beverages	Milk-based drinks	17%-17.5%
Beverages	Nonalcoholic beverages incorporating concentrated citrus juice of any single fruit other than orange, grapefruit, or lime, whether or not fortified with vitamins or minerals.	$.0758-$.079/lt
Beverages	Undenatured ethyl alcohol at least 80% alcohol for beverage purposes.	$.189/proof liter
Beverages	Rum and tafia, in containers larger than 4 liters, valued not over $0.69/proof liter.	$.237/ proof liter
Tobacco and manufactured tobacco substitutes	Unmanufactured tobacco, not stemmed or stripped.	$23.90-$39.70/100 kg
Tobacco and manufactured tobacco substitutes	Tobacco partly or wholly stemmed, not threshed, the product or two or more countries when packed together.	$548/100kg
Tobacco and manufactured tobacco substitutes	Tobacco refuse	$97/100kg

Table D-13
Energy and fuels: Canadian nontariff barriers

Affected products	Application	Alleged barrier	Source
Gasoline	Universal	Excise taxes are levied on this product.	Mkacc
Uranium	Selective	Foreigners cannot be majority owners of uranium mines.	CCG-Can

Table D-14
Energy and fuels: Canadian tariff barriers

Affected products	Comment	WTO bound range
Gas, oil, and related products	Includes crude and other petroleum oils, natural gas, propane in containers, butane, ethylene, propylene, butylene, butadiene, other gases, certain asphaltum oil, and electrical energy.	Unbound

Table D-15
Energy and fuels: Mexican nontariff barriers

Affected products	Application	Alleged barrier	Source
Energy and fuels	Universal	State monopolies exist in electricity distribution, nuclear energy generation, radioactive minerals, petroleum exploration; natural gas production and refining; and production of primary petrochemicals. Gasoline retailing and distribution are reserved for Mexican nationals. Foreign investment is not allowed in these industries.	NTE CCG-Mexico; Mkacc
Petrochemicals and petroleum-based fuels	Universal	Prices are set by the Ministry of Finance.	NTE Mkacc

Table D-16
Energy and fuels: U.S. tariff barriers

Affected products	Comment	WTO bound range
Phenols	These products contain more than 50% by weight of hydroxybenzene. There were no imports in 1999.	$.029/kg plus 12.5%

Table D-17
Chemicals, plastics, and rubber products: EU/UK nontariff barriers

Affected products	Application	Alleged barrier	Source
Fertilizer	Universal	The standards required to qualify as an EC-Type fertilizer are unnecessarily restrictive and are not based on scientific and agronomic studies.	NTE
Certain parts of cattle, sheep, and goats	Universal	Specified risk materials (SRMs) used in food, feed, medical, pharmaceutical, cosmetic, and other industrial products are banned.	NTE; TABD 5/2000
Phthalates	Universal	Product is banned in the EU. It is a type of softener used in PVCs.	Q

Table D-18
Chemicals, plastics, and rubber products: Canadian nontariff barriers

Affected products	Application	Alleged barrier	Source
Used or recycled tires	Selective	Canada only allows imports of used tires from the United States.	Mkacc

Table D-19
Chemicals, plastics, and rubber products: Canadian tariff barriers

Affected products	Comment	WTO bound range
Gloves	Surgical gloves and other gloves of vulcanized rubber	15.7%
Rubber and plastics	The EU feels that relatively high tariffs will continue to protect the rubber products industry even at the end of the Uruguay Round tariff reductions. (Mkacc)	average of 6.9%

Table D-20
Chemicals, plastics, and rubber products: Mexican nontariff barriers

Affected products	Application	Alleged barrier	Source
Certain pesticides	Universal	Certain hazardous pesticides are prohibited.	Mkacc
Organic and inorganic chemicals	Selective	Import authorization and licenses are required on environmental grounds.	Mkacc
Certain plastics	Selective	Prior authorization is required.	Mkacc
Chemicals	Selective	The government requires firms to post a bond that will cover the difference between the taxes and duties on the declared custom's value and the government-set reference price. Exporters must produce original invoices, signed and notarized by their local Chamber of Commerce, to close the bond.	NTE; Q

Table D-21
Chemical, plastics, and rubber products: U.S. nontariff barriers

Affected products	Application	Alleged barrier	Source
Perfumes	Universal	Advertising low price perfumes imitating famous brands and thus benefitting from their reputation is not prohibited.	Mkacc
Sunscreen products	Universal	FDA labeling requirements can obscure brand identity.	Mkacc

Table D-22
Pharmaceutical products: EU/UK nontariff barriers

Affected products	Application	Alleged barrier	Source
Certain pharmaceuticals	Universal	The ban on Specified Risk Materials (SRMs) used in medical and pharmaceutical products is too restrictive.	NTE; TABD 5/2000
Pharmaceuticals	Universal	Differing price, volume, and access controls imposed by national governments cause price differentials between countries. Middlemen engaged in parallel trading buy where the price is low and sell where its high. This practice undermines the ability of pharmaceutical companies to recoup R&D costs.	Q; NTE; TABD 5/2000
Non prescription medicines	Universal	Entrance to this market is hindered by divergent rules among member states for the use of trade names for nonprescription medicines, particularly for those switched from prescription to nonprescription status.	TABD 5/2000
Wide range of products	Universal	EU member states impose price, volume, and access controls that differ among countries.	NTE
Pharmaceuticals	Universal	Canada claims that the EC directives do not provide the same level of patent protection for pharmaceuticals and agricultural chemical products as for other products.	WTO

Table D-23
Pharmaceutical products: Canadian nontariff barriers

Affected products	Application	Alleged barrier	Source
Wide range of products	Universal	Canadian generic drug firms are allowed to experiment and test, manufacture and stockpile patented products 6 months before the patent expiration. A WTO panel report found that stockpiling was a violation of TRIPS.	NTE; Mkacc; WTO
Pharmaceuticals	Universal	Each Province has its own eligibility criteria and submission process for determining approval for the provincial health plan. This means that a drug could be eligible in one Province and not in another and that reimbursement rates could vary by Province. Provinces also have differing regulation on the kind of advertising permitted.	Mkacc; NTE
Pharmaceuticals	Universal	Full 20-year protection has not been given to pharmaceutical patents filed before October 1, 1989 as is required under TRIPS.	CCG-Canada

Table D-24
Pharmaceutical products: Mexican nontariff barriers

Affected products	Application	Alleged barroer	Source
Wide variety of pharmaceuticals	Universal	All pharmaceutical products and firms must be registered in Mexico, production and sale must be authorized by the Ministry of Health, and prices must be approved by the government.	Mkacc
Wide variety of pharmaceuticals	Selective	The Mexican national health system procurement is limited to national suppliers.	Mkacc
Certain pharmaceuticals	Selective	Certain pharmaceuticals are subject to import authorization and require an import license.	Mkacc
Certain pharmaceuticals	Selective	Certain cannabis, heroin, and opiate alkaloid derivatives are prohibited for reasons of public safety, health, or morality.	Mkacc
Wide variety of pharmaceuticals	Universal	Illegal trafficking in legal drugs and trafficking in illegal drugs has displaced U.S. pharmaceuticals.	Q
Vitamins	Universal	As a prerequisite for permission to import and market vitamins, Mexico now requires inspection and approval of manufacturing facilities. However, Mexico has indicated that it does not plan to conduct inspections of facilities outside of Mexico, thus precluding imports.	NTE
Pharmaceuticals	Universal	Price controls are placed on pharmaceuticals sold in the private market. Price increases must be based on changes in the consumer price index and the peso exchange rate.	Mkacc

Table D-25
Pharmaceutical products: U.S. nontariff barriers

Affected products	Application	Alleged barrier	Source
Medicinal products	Selective	The FDA approval process takes longer for imports than for U.S. products.	Mkacc
Pharmaceuticals	Selective	The over-the-counter drug approval procedure requires that the active substance have a U.S. market history. This restricts market access for products with lengthy marketing experience in countries other than the United States.	Mkacc; TABD 5/2000
Generic medicinal products	Universal	U.S. producers prepare for registration during the period of the patent thus violating patent rights.	Mkacc

Table D-26
Forest products: Canadian nontariff barriers

Affected products	Application	Alleged barrier	Source
Printed materials	Selective	The import of reprints of Canadian copyrighted work is prohibited.	CCG-Canada

Table D-27
Forest products: Mexican nontariff barriers

Affected products	Application	Alleged barrier	Source
Wood and paper materials, disposable diapers	Selective	The government requires firms to post a bond that will cover the difference between the taxes and duties on the declared custom's value and the government-set reference price. Exporters must produce original invoices, signed and notarized by their local Chamber of Commerce, to close the bond.	NTE; Q CCG-Mexico
Printed materials	Selective	Imports of printed material containing child pornography, encouraging violence, or depicting similar themes are prohibited for reasons of public safety, heath, or morality. Included in this prohibition is "Garbage Pail Kids" material.	Mkacc

Table D-28
Forest products: U.S. tariff barriers

Affected products	Comment	WTO bound range
Luggage, handbags and flat goods of rattan or of palm leaf	Imports in 1999 were less than $2 million	18.0%

Table D-29
Textiles, apparel, and footwear: EU/UK tariff barriers

Affected products	Comment	WTO bound range
Footwear	Footwear with outer soles and uppers of rubber or plastics and footwear with soles of rubber, plastics, leather, or composition leather and uppers of a materials other than leather.	17.0%

Table D-30
Textiles, apparel, and footwear: Canadian nontariff barriers

Affected products	Application	Alleged barrier	Source
Textiles and apparel	Selective	NAFTA rules of origin give preferential treatment to textiles and apparel made from yarn or fibers of North American country origin.	Mkacc
Textiles and apparel	Selective	Canada requires specific origin label.	Ceei; Q
Textiles and apparel	Universal	Labels on apparel imported into Quebec must be in French.	Q
Textiles and apparel	Selective	Excessive documentation is required for clearance; especially product description.	Ceei; Mkacc
Textiles and apparel	Selective	A 7% VAT is applied to the duty-paid value of all textiles and apparel.	Ceei

Table D-31
Textiles, apparel, and footwear: Canadian tariff barriers

Affected products	Comment	WTO bound range
Wadding	Articles of wadding of man-made fibers.	16%
Floor coverings	Consisting of a coating or covering applied on a textile backing, whether or not cut to shape, including those used in dairy cattle stalls.	15.7%-18%
Apparel	Articles of apparel and clothing accessories.	15%-18%
Made-up textile articles	Blankets; bed, table, toilet, and kitchen linen; curtains; sacks and bags; tarpaulins, awnings, and sunblinds; tents; sails; camping goods; floor cloths, dish-cloths, dusters, and similar cleaning cloths; life jackets; sets for making into rugs, embroidered table cloths, or similar textile articles put up for retail sale; worn clothing.	16%-18%
Footwear	All completed footwear, except downhill ski-boots, women's footwear valued at C$30 or more, and uppers of textile materials.	15.7%-20%
Headgear	Hairnets and knitted or crocheted headgear.	15.7%
Wigs, false beards, eyebrows and eyelashes, switches and the like	Articles of human or animal hair or of textile materials.	15.7%

Table D-32
Textiles, apparel, and footwear: Mexican nontariff barriers

Affected products	Application	Alleged barrier	Source
Footwear	Selective	Compliance with rules of origin requires certificates listing the exact number of shoes bound for Mexico. This has the effect of burdening shippers with excessive paperwork and by requiring the use of Mexican warehouses for distribution.	Mkacc
Textiles and apparel	Selective	NAFTA rules of origin give preferential treatment to textiles made from yarn or fibers of North American origin.	Mkacc; Q
Textiles and apparel	Selective	Labeling requirements are onerous because some of the information required, such as importer name and address, is not known at the time of manufacture.	Mkacc
Textiles and apparel	Selective	Solicitation of bribes by Customs agents.	Q
Textiles and apparel	Selective	Developing countries are given preferential tariff treatment that displaces U.S. goods.	Q
Textiles, apparel, and footwear	Selective	The government requires firms to post a bond that will cover the difference between the taxes and duties on the declared custom's value and the government-set reference price. Exporters must produce original invoices, signed and notarized by their local Chamber of Commerce, to close the bond.	NTE; Q CCG-Mexico
Certain textiles, clothing, and footwear	Selective	Special certification of origin is required for certain textiles, clothing, and footwear that are similar or identical to those subject to antidumping duties. These provisions do not apply to U.S. origin goods.	Mkacc CCG-Mexico
Animal skins	Selective	Mexico prohibits trade in or use of skins produced from animals in danger of extinction.	Mkacc

Table D-33
Textiles, apparel, and footwear: U.S. nontariff barriers

Affected products	Application	Alleged barrier	Source
Textiles, footwear, clothing	Selective	U.S. Customs requires voluminous detailed information, much of which is irrelevant.	Mkacc
Textiles and clothing	Selective	NAFTA rules of origin give preferential treatment to textiles made from yarn or fibers of North America origin.	Mkacc
Yarn	Selective	Weaver's beams are classified as "yarns" rather than "articles of yarn," thus requiring an export license.	Mkacc
Textiles	Selective	Marking and labeling requirements, including country of origin, ultimate purchaser, country of manufacture, generic name and proportion of constituent fibers, and any wool or fur content, are burdensome.	Mkacc
Textiles and apparel	Selective	Printing and dying of fabric do not confer origin even if manufactured into scarves, tables cloths, or bed linen. As a result these products may be subject to quotas of the country of origin of the fabric whereas products from the country that printed or dyed the fabric are not.	Mkacc; WTO

Table D-34
Textiles, apparel, and footwear: U.S. tariff barriers

Affected products	Comment	WTO bound range
Certain woven wool and cotton fabric	Wool and cotton fabric imports that exceed assigned quotas are subject to tariffs as high as 74.8%. Wool fabric duties are 25%. Cotton and cotton/wool blend fabric duties are under 20%.	15.5% - 25.0%
Certain woven fabric of synthetic or artificial fiber	This includes blends that are at least 36% wool. Compound duty rates have been converted to ad valorem equivalents.	15%-25%
Wool gauze and synthetic twine	Compound duty have been converted to ad valorem equivalents.	16.5% - 17.7%
Woolen fabrics and articles of apparel	Significant tariffs and tariff peaks will remain on woolen fabrics and articles of apparel of export interest to the EU, even after Uruguary Round reductions are fully implemented. (Mkacc)	15.6% - 33.3%
Footwear	This includes waterproof footwear with outer soles and uppers of rubber or plastics, sports footwear, protective boots or shoe coverings, and low-value footwear. Compound duty rates have been converted to ad valorem equivalents.	20.9%-58.8%
Bed linen	Cotton, printed or containing embroidery, lace, braid, edging, trimming, piping, or applique work.	20.9%
Artificial flowers	Artificial flowers, foliage, and fruit of materials other than plastics, feathers, and man-made fibers; articles made of these products.	17%

Table D-35
Minerals and metals: Canadian tariff barriers

Affected products	Comment	WTO bound range
Fabricated asbestos	Woven or knitted fabric, clothing, accessories, footwear, and headgear.	15.7%
Articles of glass fibers	Woven fabrics, not for use in tires; mats; thin sheets, including those coated with asphalt for use in roofing; and other woven, knitted, or braided articles.	15.7%
Pottery and china	Although tariffs will decrease from 10.4% to 7.2% under the Uruguay Round Agreement, the EU feels that they are barriers because they will still be higher than those that U.S. exporters face. (Mkacc)	7.2%

Table D-36
Minerals and metals: Mexican nontariff barriers

Affected products	Application	Alleged barrier	Source
Ceramic products	Universal	Testing procedures used to establish tolerable levels of lead and cadmium are burdensome.	Mkacc
Steel and other products	Selective	The government requires firms to post a bond that will cover the difference between the taxes and duties on the declared custom's value and the government-set reference price. Exporters must produce original invoices, signed and notarized by their local Chamber of Commerce, to close the bond.	NTE

Table D-37
Minerals and metals: U.S. nontariff barriers

Affected products	Application	Alleged barrier	Source
Steel	Selective	It is common at the sub-Federal level for government contracts to impose local content restrictions.	Mkacc
Numerous steel products	Selective	The United States imposes dumping duties on numerous steel products from the EU, Canada and Mexico.	Q
Numerous steel products	Selective	U.S. "Buy American" restrictions are a trade barrier to imports.	Q

Table D-38
Minerals and metals: U.S. tariff barriers

Affected products	Comment	WTO bound range
Tableware	Table knives and forks valued < $.25 and sets containing these items. Compound duty rates have been converted to ad valorem equivalents	16.0% - 24.0%
Hotel or restaurant ware	These products are important EU exports and face tariffs substantially higher than Mexico, one of their major competitors. (Mkacc)	25.0% - 28.0%
Tableware and kitchenware	Serviette rings and certain other articles of porcelain or china.	20.8%
Glassware	Includes table, kitchen, toilet, office, and indoor decoration as well as low-value glassware and decorated glassware. These products are important EU exports and face tariffs substantially higher than Mexico, one of their major competitors. (Mkacc)	15.0% - 28.5%
Titanium powder and miscellaneous wrought titanium		15.0%

Table D-39
Machinery and transportation equipment: EU/UK nontariff barriers

Affected products	Application	Alleged barrier	Source
Motor vehicles	Universal	Substance bans related to the disposal of vehicles are not justified by scientific risk assessments.	NTE
Aircraft	Selective	Aircraft certification process is not transparent and not consistently applied on both sides of the Atlantic.	NTE; Q
Aircraft	Selective	EU member states have imposed noise abatement standards that are design standards not scientifically based on performance and that pass the costs of compliance on to non-EU companies.	NTE
Aircraft	Selective	Certain EU member governments subsidize Airbus.	NTE
Aircraft	Selective	The benefits of EU aviation law are reserved for firms that are majority owned and controlled by EU nationals.	NTE
Aircraft	Selective	Harmonization of the European Joint Aviation requirements and U.S. Federal Aviation Regulations is ongoing. In the interim manufacturers most demonstrate compliance to multiple agencies.	TABD 5/2000
Aircraft engines	Selective	The UK limits investment in Rolls Royce and the government holds the golden share.	Q
Ships	Selective	EU member governments subsidize shipbuilding and ship repair.	NTE
Ships	Selective	The benefits of EU maritime law are reserved for firms that are majority owned and controlled by EU nationals.	NTE
Telecommunications equipment	Selective	Most EU member states discriminate against non-EU bids and market access varies widely among states.	NTE
Medical devices	Universal	Medical devices classified as pharmaceuticals must be approved by both UK and EU.	Q
Databases	Selective	A directive extends copyright protection for 15 years to the contents of databases, but this right is only available to non-EU creators on the basis of reciprocity.	NTE
Motorcycles	Selective	UK/EU regulations regarding sound emissions are difficult to meet. UK/EU regulations differ from those of the U.S.	Q
Electrical and electronic equipment	Universal	The EU is developing a revised Electromagnetic Compatibility Directive that would impose unnecessarily restrictive limits on low frequency emissions. Certain individual member states are developing national limits which may be even more restrictive.	NTE; TABD 5/2000

Table D-39—*Continued*
Machinery and transportation equipment: EU/UK nontariff barriers

Affected products	Application	Alleged barrier	Source
Electrical and electronic equipment	Universal	The draft proposal for a Directive on Waste from Electrical and Electronic Equipment, if adopted, would adversely affect trade because of its ban on certain materials for which no viable substitute exists and its provisions regarding producers' retroactive responsibility for collection and recycling of end-of-life products.	TABD 5/2000; NTE
Electrical and electronic equipment	Universal	Differing regulations in the EU and the United States governing electromagnetic fields are a barrier to trade.	TABD 5/2000
Air conditioning equipment	Universal	The European Commission adopted a proposal to phase-out the use of hydrochlorofluorocarbons by 2001 that unfairly disadvantages the air-conditioning industry vis-á-vis the heat pump industry which has 2004 deadline. In addition, Denmark and the UK have proposed banning hydrofluorocarbons.	NTE; TABD 5/2000
Batteries	Universal	The European Commission has prepared a draft Directive on Batteries that proposes to ban nickel-cadmium batteries.	NTE TABD 5/2000
Telecommunications equipment	Selective	U.S. bidders are barred from applying for contracts that are below certain threshold levels that are awarded by central governments.	Mkacc
Air-conditioning and refrigeration equipment	Universal	A recent EU Directive inappropriately classifies certain parts of air-conditioning and refrigeration systems as pressure vessels. As such, these parts must meet overly restrictive requirements if they are to receive an EC mark. Comparable U.S. products do not currently meet these standards which will become mandatory in May 2002.	Q

Table D-40
Machinery and transportation equipment: EU/UK tariff barriers

Affected products	Comment	WTO bound range
Motor vehicles	Road tractors for semitrailers and motor vehicles of a cylinder capacity exceeding 2500cc for the transport of more than 10 persons.	16%
Motor vehicles	Motor vehicles for the transport of goods with a cylinder capacity exceeding 2500cc.	22%
Motor vehicles	The EU imposes a 10% tariff on automotive products from the United States and Canada. The EU-Mexico FTA will allow these products to enter duty-free in 3 years. These duties disadvantage U.S. products in the EU market. (Q)	10%
Motor vehicle chassis	For vehicles for the transport of goods or of more than 10 persons.	19.0%
Bicycles		15.0%

Table D-41
Machinery and transportation equipment: Canadian nontariff barriers

Affected products	Application	Alleged barrier	Source
Theatrical and video tape movies	Universal	There are seven different provincial classification boards to which member companies must submit products destined for theatrical release, five of which also classify products of home video distribution. In addition, Quebec requires that all video products bear a government-issued classification sticker.	Mkacc
Certain motor vehicles and parts	Selective	Manufacturers not covered by the "Auto Pact" prior to 1989 may not join and do not receive preferential tariff treatment. A WTO panel report found this to be in breach of the Most Favored Nation Principle of the GATT.	Mkacc; WTO
Used motor vehicles	Selective	Canada prohibits the import of used motor vehicles except those from the United States.	Mkacc
Ships	Selective	Canada reserves coastal trade for Canadian ships unless a temporary waiver is granted.	Mkacc
Ships	Selective	It is Federal Government policy to purchase ships from Canadian sources.	Mkacc
Ships	Selective	Import of foreign dredgers for coastal trade is forbidden.	Mkacc
Heavy machinery	Selective	Tenders for products such as steam and hydraulic turbines, boilers, metal cutting machines, and electrical products are often restricted by provincial procurement rules.	Mkacc

Table D-41—*Continued*
Machinery and transportation equipment: Canadian nontariff barriers

Affected products	Application	Alleged barrier	Source
Medical devices	Universal	FDA-approval products face duplicative standards, testing, and certification requirements.	Q
Medical devices	Universal	Canadian regulatory approval process is slow.	Q

Table D-42
Machinery and transportation equipment: Canadian tariff barriers

Affected products	Comment	WTO bound range
Motor vehicle accessories	Seat covers of textile material.	15.8%
Parachutes and rotochutes		15.7%
Ships and vessels	Certain open vessels for the transport of people or goods, including warships and lifeboats.	15%
Ships and vessels	The tariffs on cruise ships, excursion boats, ferryboats, tankers, refrigerated vessels, fishing vessel of a length not exceeding 30.5 m; and other closed-hull vessels for the transport of people or goods are unbound. Applied tariffs are 25%.	Unbound
Ships and vessels	The tariffs on tugs, dredgers, floating or submersible drilling or production platforms, and certain other closed hull ships are unbound. The level of applied tariffs, 20%-25%, is a barrier to market access. (Mkacc)	Unbound
Ships and vessels	Floating structures, such as tanks, coffer-dams, and landing stages, and vessels and floating structures for scrapping.	15.7%

Table D-43
Machinery and transportation equipment: Mexican nontariff barriers

Affected products	Application	Alleged barrier	Source
Auto parts and components	Selective	Assemblers and manufacturers must be registered with SECOFI.	NTE
Cars and light trucks	Universal	The Mexican Government imposes a new vehicle tax.	NTE; Mkacc
Automotive products	Selective	Prior import licenses are required for certain products.	NTE; Mkacc
Motor vehicles	Selective	Imports must contain a certain level (34%) of Mexican content. These measures are inconsistent with the WTO agreement on Trade-Related Investment Measures. Therefore, in December 1999, Mexico requested a 4-year extension of this agreement the WTO that would parallel the phase-out period specified in NAFTA.	NTE; Mkacc
Motor vehicles	Selective	Importers are required to show a foreign-exchange surplus in their business transactions. This requirement will be eliminated for Canada and the United States in 2004.	NTE; Mkacc
Certain used machinery	Selective	Imports such as pumps; loading, mining, agricultural, and construction equipment; and sewing machines require an import license which is granted only if there is no domestic production.	Mkacc; Q
Appliances, blank video cassette and audio recording tapes	Selective	The government requires firms to post a bond that will cover the difference between the taxes and duties on the declared custom's value and the government-set reference price. Exporters must produce original invoices, signed and notarized by their local Chamber of Commerce, to close the bond.	NTE; Q CCG-Mexico
Medical devices	Universal	Conformity assessment and certification regulations would require duplicative testing, if applied.	Q
Medical devices	Universal	Mexico is instituting a new more rigorous certification, listing, and regulatory process. It has also introduced new application and registration fees.	Q
Medical devices	Selective	Domestic products receive preferential treatment in purchases by government institutions.	Q
Used cars	Selective	The importation of used cars into Mexico is prohibited.	Mkacc

Table D-44
Machinery and transportation equipment: U.S. nontariff barriers

Affected products	Application	Alleged barrier	Source
Motor vehicles	Universal	Three taxes on the sale of automobiles are barriers to imports: the Luxury Tax, the Corporate Average Fuel Economy Payment, and the so-called Gas Guzzler Tax.	Mkacc
Motor vehicles	Universal	Labeling requirements may discourage imports of parts and disclose confidential data. They also appear to be designed to influence consumers to buy cars of U.S.-Canadian origin.	Mkacc
Encryption products	Selective	Both the United States and the EU maintain export control regimes on the strongest encryption products.	Mkacc
Satellites	Selective	Export controls may impair the ability of European launch providers to serve the U.S. market.	Mkacc
Large civil aircraft (LCA)	Selective	A large share of NASA's and FAA's R&D spending benefits the LCA industry.	Mkacc
Aircraft	Selective	The United States uses high-level political leverage to induce third-country airlines to purchase U.S. aircraft.	Mkacc
Aircraft	Selective	Harmonization of the European Joint Aviation requirements and U.S. Federal Aviation Regulations is ongoing. In the interim manufacturers most demonstrate compliance to multiple agencies.	TABD 5/2000
Ships	Selective	There is a 50% ad valorem tax on nonemergency repairs of U.S.-owned ships outside the United States and on imported equipment for boats.	Mkacc
Ships	Selective	Ships used for coastwise traffic must be U.S.-built; shipyards receive various subsidies and tax deferments.	Mkacc
Ships	Selective	Federal, State, and local funds are being used to subsidize the revitalization of the Philadelphia shipyard.	Mkacc
Electrical appliances	Universal	Underwriter's Laboratories has the discretion to make seemingly arbitrary revisions to its standards.	Mkacc
Electrical and electronic equipment	Universal	The FCC rules on electromagnetic fields differ from the international standard and result in additional testing and costs.	TABD 5/2000
Electrical equipment and domestic appliances	Universal	Third party testing and certification is required rather than self-certification by manufacturers. This creates disproportionately high costs for suppliers to the U.S. market.	Mkacc

Table D-44—*Continued*
Machinery and transportation equipment: U.S. nontariff barriers

Affected products	Application	Alleged barrier	Source
Medical devices	Universal	Food and Drug Administration approval takes too long.	Q
Medical devices	Selective	Customs officials have been screening certain imports more carefully, requiring extensive record keeping.	Q
Medical devices	Selective	Some products must be approved by both Customs and the FDA.	Q
Recreational marine engines	Universal	The U.S. Government has not accepted ISO 8179 as a valid test procedure for conformity assessment purposes.	TABD 5/2000
Ball and roller bearings	Selective	Congress has imposed a “Buy America” requirement on the procurement of ball and roller bearings since 1988.	Mkacc
Telecommunications equipment	Selective	EU firms are barred from bidding on U.S. Federal Government contracts below the threshold levels imposed by the WTO Agreement on Government Procurement.	Mkacc

Table D-45
Machinery and transportation equipment: U.S. tariff barriers

Affected products	Comment	WTO bound range
Color TV picture tubes	Cathode-ray tubes, including video monitor tubes, having a display diagonal exceeding 34.59 cm.	15%
Motor vehicles	All motor vehicles for the transport of goods, except dumpers and cab chassis. Pursuant to GATT Article XXVIII, the United States, in 1963, suspended the concession rate of 8.5%.	25%
Parts of telescopic sights for rifles	Complete telescopic sights are subject to a 14.9% duty.	16%
Watches and clocks	Compound rates of duty have been converted to ad valorem equivalents	15.0% - 24.0%

Table D-46
Miscellaneous products: EU/UK nontariff barriers

Affected products	Application	Alleged barrier	Source
Certain toys	Universal	EU ban on phthalates affects certain toys.	Q

Table D-47
Miscellaneous products: Canadian nontariff barriers

Affected products	Application	Alleged barrier	Source
Jewelry	Universal	Excise taxes are levied on these products.	Mkacc

Table D-48
Miscellaneous products: Canadian tariff barriers

Affected products	Comment	WTO bound range
Gloves	Gloves, mittens, and mitts of furskin, leather, or composition leather, other than kid, including those designed for use in sports.	15.7%
Artificial fur and articles of artificial fur		15.7%
Seats	Textile fabrics for aircraft seats.	15.7%
Sleeping bags		15.7%
Certain articles of bedding and similar furnishing		15.7%
Air-supported prefabricated buildings		15.7%
Ice or roller skates attached to boots		18.2%
Athletic equipment	Shin-guards and elbow or shoulder pads, except for football; waist, thigh, and hip protective equipment.	15.7%
Paint rollers of textile materials		15.7%
Mops	Made of textile materials with man-made fibers.	15.7%
Parts of slide fasteners containing man-made fibers		15.7%
Typewriter ribbons	Woven of man-made fibers.	15.7%
Powder puffs and pads	For the application of cosmetics; made from man-made fibers.	15.7%
Collectors' pieces	Postage or revenue stamps, stamp-postmarks, first-day covers, postal stationery (stamped paper), and the like, used, or if unused, not of current or new issue in the country to which they are destined.	Unbound

Table D-49
Miscellaneous products: Mexican nontariff barriers

Affected products	Application	Alleged barrier	Source
Toys	Selective	The government requires firms to post a bond that will cover the difference between the taxes and duties on the declared custom's value and the government-set reference price. Exporters must produce original invoices, signed and notarized by their local Chamber of Commerce, to close the bond.	NTE
Ceramic products	Universal	Testing procedures used to establish tolerable levels of lead and cadmium are burdensome.	Mkacc

Table D-50
Miscellaneous products: U.S. tariff barriers

Affected products	Comment	WTO bound range
Travel goods	Trunks, suitcases, vanity cases, attache cases, briefcases, school satchels and similar containers, except those with an outer surface of leather or vegetable fibers.	17.6%-20%
Handbags; articles normally carried in the pocket or handbag	Those with an outer surface of plastics or textile fibers other than vegetable fibers, leather, or silk.	16%-20%
Other cases, bags, and containers	Including travel, sports, and similar bags, except those with an outer surface of leather or vegetable fibers.	17.6%-20%
Brooms	Wholly or in part of broom corn.	32.0% - 35.0%
Jewelry	Final Uruguay Round rates are higher than the EU rates of 2.5%-3%. There are significant duties on certain semifinished products made of precious metals where even modest tariffs significantly reduce market access. (Mkacc)	as high as 13.5%

Table D-51
Services: EU/UK nontariff barriers

Affected services	Application	Alleged barrier	Source
Accounting services	Selective	Accounting services are permitted, provided there is reciprocal recognition of credentials and subject to a work permit, which is granted only if it is determined that services cannot be met by UK accountants.	GATS-EU
Airport ground handling services	Selective	EU airports can limit the number of firms supplying services, either for themselves or for other carriers.	NTE
Architectural services	Selective	Architectural services are permitted, provided there is reciprocal recognition of credentials and subject to a work permit, which is granted only if it is determined that services cannot be met by UK architects.	GATS-EU
Audiovisual services	Selective	The Broadcast Directive (EC Directive 89/552) sets programming quotas, obligating members to reserve the majority of transmission time for European-oriented programs broadcast over commercial television, cable and satellite transmission.	MPAA; NTE
Banking, insurance, and investment services	Selective	EU directives include reciprocal national treatment clauses.	NTE
Banking and securities services	Selective	Only firms with a registered office in the European Communities can act as depositories for the assets of investment funds.	GATS-EU
Banking and securities services	Selective	The UK requires that inter-dealer brokers, which are a category of financial institutions dealing in Government debt, be established in the European Economic Area and separately capitalized.	GATS-EU
Banking and securities services	Selective	The UK states that sterling issues, including privately led issues, can be lead managed only by a firm established in the European Economic Area.	GATS-EU
Banking and securities services	Universal	Only a specialized management company can manage unit trusts and investment companies.	GATS-EU
Computer reservation systems (CRS) services	Selective	CRS companies in several member states are owned by the state's flag air carrier, and have engaged in anti-competitive practices.	NTE
Financial services	Selective	Direct branches of non-EU service providers are subject to individual member country authorization and regulation.	NTE
Franchise services	Selective	The EU reserves the right to restrict trade in arms, chemical products, explosives and precious metals.	GATS-EU

Table D-51—*Continued*
Services: EU/UK nontariff barriers

Affected services	Application	Alleged barrier	Source
Franchise, wholesale, and retail services	Universal	Distance Selling Directive rules and requirements may impede the operations of direct sellers.	Directive 97/7/EC
Health services	Universal	Establishment for doctors under the National Health Service is subject to medical manpower planning.	GATS-EU
Health services	Selective	Market access for veterinary services is permitted through a partnership only.	GATS-EU
Insurance services	Selective	The European Union imposes reciprocity provisions on foreign investors in insurance. So far, no U.S. firms have been affected.	NTE Report
Investment services	Selective	EU investment managers receive preferential treatment in reporting requirements for investment.	Q
Legal services	Selective	EU member states enforce a variety of restrictions on foreign nationals. To practic law in the UK a non-EU person may be required to pass a 1-year diploma offered by certain polytechics, complete a 1-year practical course, and complete a 1-year apprenticeship.	NTE
Postal services	Universal	Postal monopolies in the EU create unequal competitive conditions for express package services.	NTE
Reinsurance services	Universal	The regulatory system governing reinsurance is inflexible.	Q
Rental or leasing services	Selective	Aircraft used by EU air carriers must be registered in the member state licensing the air carrier or elsewhere in the Community. Waivers can be granted for short term lease contracts or under exceptional circumstances.	GATS-EU
Rental or leasing services	Selective	To be registered in the aircraft register of these member states, the aircraft must be owned either by natural persons meeting specific nationality criteria or by juridical persons meeting specific criteria regarding ownership of capital and control (including nationality of directors).	GATS-EU
Telecommunication services	Universal	National Regulatory authorities in Germany, Sweden, the UK, and Spain have been unwilling to exert their full oversight authority for telecommunication services.	NTE
Telecommunication services	Universal	The telecommunications regulator, OFTEL, granted British Telecom an exclusive right to supply Digital Subscriber line services during March 1, 2000 - July 1, 2001 in violation of its WTO commitments.	NTE
Transport services	Universal	An economic needs test applies, based on the number of service suppliers in the local geographic area, for the provision of taxi services.	GATS-EU

Table D-51—*Continued*
Services: EU/UK nontariff barriers

Affected services	Application	Alleged barrier	Source
Transport services	Selective	The benefits of EU aviation law are reserved for firms that are majority owned and controlled by EU nationals.	NTE
TV advertising services	Universal	There is a potential ban on TV advertising that targets children.	Q

Table D-52
Services: Canadian nontariff barriers

Affected services	Application	Alleged barrier	Source
Architectural services	Selective	Foreign firms must take the form of a sole proprietorship or partnership.	GATS-EU
Audiovisual and publishing services	Selective	A formal investment review is required for any foreign investment in activities, such as publication and distribution of books, magazines, videos, and music recordings, relating to Canadian culture or national heritage.	U.S. Embassy telegram; CCG-Canada
Audiovisual services	Selective	Acquisition of Canadian film distributors is not permitted, and investment in new business is permitted only to import proprietary products. Takeovers of foreign businesses operating in Canada will only be allowed if a portion of earnings is reinvested in accordance with national and cultural policies.	NTE; CCG-Canada; WTO
Audiovisual services	Selective	Foreign investment in radio and television stations is limited to 20% or 33% of a holding company.	Investment Climate Statement
Audiovisual services	Selective	Canada applies the principal of reciprocity rather than national treatment in the payment of a neighboring rights royalty to be made by broadcasters and a blank tape levy to be made by manufacturers and importers to artists from countries that are signatories of the 1961 Rome Convention.	NTE; CCG-Canada
Audiovisual services	Selective	The Canadian Radio-Television and Telecommunications Commission (CRTC) requires that Canadian conventional, over-the-air broadcasts make up 60% of television time, 35% of the music on broadcast radio qualify as Canadian, direct-to-home broadcasts contain more than 50% Canadian content, and that cable television providers carry a majority of Canadian signals and services.	NTE
Audiovisual services	Selective	In cases where a Canadian broadcasting service is licensed in a format competitive with a non-Canadian service, the CRTC may drop the non-Canadian service if the Canadian service requests it. Licenses will not be granted or renewed to firms that do not have Canadians making up at least 80% of shareholders and directors.	CCG-Canada; NTE
Audiovisual services	Selective	The Quebec Cinema Act encourages French language dubbing to be done in Quebec by placing certain distribution restrictions on films that have been dubbed in French outside of Quebec.	Mkacc; NTE
Banking and securities services	Universal	Federally regulated financial institutions with capital in excess of C$750 million must have 35% of their voting shares widely held and listed on the Canadian stock exchange within 5 years of reaching the capital threshold.	GATS-Canada

Table D-52—*Continued*
Services: Canadian nontariff barriers

Affected services	Application	Alleged barrier	Source
Banking and securities services	Selective	For foreign-owned federally regulated institutions, a controlling number of shares of a subsidiary must be held directly by the foreign company in the jurisdiction where it principally transacts business.	GATS-Canada
Banking and securities services	Selective	Imported supplies do not count for value-added tax exemption, and supplies between nonresident branches are treated as supplies between separate persons for the purpose of value-added taxes.	GATS-Canada
Banking, insurance, and securities services	Selective	At least half of the directors of federally regulated institutions must be either Canadian citizens or permanent residents.	GATS-Canada
Banking and securities services	Universal	Different tax treatment is accorded with respect to an investment in a venture capital corporation as prescribed pursuant to the Income Tax Act of Canada and provincial laws.	GATS-Canada
Banking and securities services	Universal	No one entity may own more than 10% of any class of shares of a Schedule I (more than C$750 million in capital) bank.	GATS-Canada
Banking and securities services	Selective	Mutual funds which offer securities in Canada must use a resident custodian. A nonresident subcustodian may be used if the fund has shareholders equity of at least, $100 million.	GATS-Canada
Banking services	Selective	Direct branching from abroad is not allowed; foreign banks must establish a Schedule II subsidiary and maintain a separate board of directors, half of whom must be Canadian residents.	Mkacc
Banking services	Selective	Foreign banks are precluded from competing for large corporate loans, since they cannot extend loans to a single borrower in excess of 100% of the subsidiary's capital and cannot take advantage of the parent bank's capital.	Mkacc
Construction services	Selective	Construction services relating to barges are protected by cabotage restrictions.	U.S. DOC
Education services	Selective	National treatment is not guaranteed.	GATS-U.S.
Energy services	Universal	Canada maintains laws and policies that restrict new or expanded investment in the energy sector.	CCG-Canada

Table D-52—*Continued*
Services: Canadian nontariff barriers

Affected services	Application	Alleged barrier	Source
Insurance services	Selective	Foreign ownership of insurance firms is subject to investment review thresholds, and several provinces continue to subject foreign investment in existing, provincially incorporated firms to prior authorization. Commercial presence is required. However, insurance companies from abroad may open branches only on the condition that they maintain trust assets equivalent to their liabilities.	U.S. Embassy telegram; NTE
Insurance services	Selective	For non-North American firms, most direct insurance, reinsurance, and retrocession, must be supplied through a commercial presence.	GATS-Canada
Insurance services	Selective	An excise tax of 10% is applicable on net premiums paid to non-resident insurers or exchanges in regard to a contract against a risk ordinarily within Canada, unless such insurance is not available in Canada.	GATS-Canada
Insurance services	Universal	In British Columbia, Saskatchewan, and Manitoba, consumers must purchase the required minimum automobile insurance from the government insurer. In Quebec, bodily injury claims are covered by a government insurer.	NTE
Insurance services	Selective	For consumption abroad of reinsurance and retrocession services, the purchase of reinsurance by a Canadian insurer from a non-resident reinsurer is limited to no more than 25% of the risk undertaken by the insurer purchasing the reinsurance. The purchase of reinsurance from a resident reinsurer is limited to no more than 75% of the risks undertaken by the insurer purchasing the reinsurance.	GATS-Canada
Insurance services	Selective	Regulator requires a comfort letter from the parent company before allowing a foreign firm to establish or acquire a subsidiary. This undermines the ability of companies to establish limited liability subsidiaries.	Q
Insurance services	Selective	In Quebec, Canadian branches of foreign insurers may only count their capital in Canada when calculating earthquake reserves.	Q
Investment services	Selective	Managers of pension funds for U.S. affiliates must invest 75% of the total in Canada securities.	Q
Legal services	Selective	Foreign firms must take the form of a sole proprietorship or partnership. For lawyers, permanent residence is required in Prince Edward Island, Ontario, Alberta, and Newfoundland. In Quebec, citizenship is required.	GATS-U.S. NTE CCG-Canada

Table D-52—*Continued*
Services: Canadian nontariff barriers

Affected services	Application	Alleged barrier	Source
Publishing and distribution services	Selective	Foreign acquisition of Canadian-owned book publishing and distribution firms is prohibited. The Investment Canada Act requires that foreign investments be compatible with national cultural policies and of net benefit to Canada and the Canadian-controlled sector.	NTE; CCG-Canada
Telecommunication services	Selective	Long-distance telecommunications providers pay unjustifiably high "contributions" to cover the costs of the local facilities. Contributions are redistributed to local service companies, many of which are long-distance providers.	Q; NTE
Telecommunication services	Selective	Canada limits foreign investment in facilities-based carriers to 20% direct investment and 33.3% indirect investment, with the cumulative foreign investment not to exceed 46.7%.	GATS-Can; NTE; CCG-Canada
Telecommunication services	Selective	Facilities-based telecommunications service suppliers that exceeded the permissible cumulative foreign investment level may be subject to restrictions.	GATS-Canada
Telecommunication services	Selective	At least 80% of the board of directors of facilities-based carriers must be Canadian citizens.	GATS-Can; NTE
Transport services	Selective	Foreigners are limited to 25% ownership of Canadian air carriers.	CCG-Canada
Travel and tourism services	Selective	Work authorizations are now required for tour directors who remain in Canada for the tourist season.	U.S. Embassy telegram

Table D-53
Services: Mexican nontariff barriers

Affected services	Application	Alleged barrier	Source
Various service industries	Selective	Foreign investment in many sector industries, including advertising, film screening, private film production, cable television, building cleaning, car rental (without driver), construction, courier, credit reporting, industrial design, market research, medical and dental, photocopying, placement and supply of professional personnel, professional agricultural, protection and guard, rental or leasing, research and development, specialty design, motor vehicle maintenance and repair, air transport support, and weighbridge services is limited to 49%.	GATS-Mex; U.S. Embassy telegram; CCG-Mexico
Various service industries	Selective	Industries reserved for Mexican nationals include accounting services; noncable radio and television services; credit unions; savings and loan companies; development banks;the handling and application of chemical, pharmaceutical, and biological substances including pesticides; retail sales of gasoline; domestic land passenger transportation; tourism and cargo (excluding messenger and parcel) services. Foreign investment is not permitted in these industries.	U.S. Embassy telegram; Mkacc; CCG-Mexico; GATS-Mexico
Various service industries	Selective	Industries reserved exclusively for the Mexican Government include postal services; generation and distribution of electricity, and oil exploration and extraction of hydrocarbons. Foreign investment is not permitted in these industries.	U.S. Embassy telegram; Mkacc ; CCG-Mexico; EIA
Accounting services	Selective	Only Mexican nationals who are licensed accountants may perform tax audits for various enterprises.	NAFTA
Accounting services	Selective	Foreign investment in Mexican accounting firms is limited to 49% and foreign firms must use the name of the Mexican partner.	GATS-Mexico
Accounting services	Universal	All accounting service providers must have a degree recognized or confirmed by the Ministry of Public Education and a professional license in order to practice in Mexico.	GATS-Mexico
Administrative formalities and collection services	Selective	Foreign investment is limited to 40%.	GATS-Mex
Architectural services	Selective	Foreign engineers must have an officially recognized degree and obtain a professional license to practice in Mexico. Mexican citizenship is reportedly required.	GATS-Mex; U.S. Embassy telegram
Audiovisual services	Selective	The retransmission of advertisements in programs transmitted from outside Mexico is not permitted.	U.S. Embassy telegram

Table D-53—*Continued*
Services: Mexican nontariff barriers

Affected services	Application	Alleged barrier	Source
Audiovisual services	Universal	With the exception of children's films and documentaries, dubbing is not allowed.	U.S. Embassy telegram; NTE
Audiovisual services	Selective	Mexico requires that 30% of screen time be devoted to Mexican films.	NAFTA
Audiovisual services	Selective	The actors' union requires that a Mexican national be hired for every foreign individual hired for film-related activities.	GATS-Mexico
Banking and securities services	Selective	Foreign holdings many not exceed 30% and effective control of the enterprise by Mexican shareholders is required. Foreign individuals' holdings may not exceed 2.5% to 7.5%, depending on the type of institution.	GATS-Mexico
Banking and securities services	Selective	Foreign financial firms including banks and securities firms need prior authorization of the Ministry of Finance and Public Credit. Such offices may not act as financial intermediaries.	GATS-Mexico
Banking and securities services	Selective	Both Mexican and foreign individuals and companies may own up to 20% of a Mexican financial institution. As a group, foreigners can own up to 49% of a bank, stock exchange, or financial group.	U.S. Embassy telegram; Mkacc
Computer services	Selective	The duty-free system that exempts computer-related goods from import duties only applies to domestic producers.	GATS-Mexico
Construction services	Universal	Ministry of Communication and Transport approval and authorization is required for the provision of construction services of visual and electric aids for runways.	GATS-Mexico
Courier services	Selective	U.S. express delivery providers have not been granted the national treatment extended to them under NAFTA.	U.S. Embassy telegram
Education services	Selective	Prior approval of the *Comisión Nacional de Inversiones Extranjeras* is required for investors of North American countries to own, directly or indirectly, more than 49% interest in an enterprise established or to be established in the territory of Mexico that provides preschool, primary, secondary, preparatory, higher, worker or peasant, or "normal" educational services.	NAFTA
Engineering services	Selective	Foreign engineers must have an officially recognized degree and obtain a professional license to practice in Mexico. Mexican citizenship is reportedly required.	GATS-Mexico; U.S. Embassy telegram

Table D-53—*Continued*
Services: Mexican nontariff barriers

Affected services	Application	Alleged barrier	Source
Health services	Selective	Foreign doctors must be accredited by a Mexican university and the Secretariat of Education.	U.S. Embassy telegram
Insurance services	Selective	Foreign investors from non-North American countries in direct insurance, reinsurance, and insurance agencies and brokerages may only hold up to an aggregate of 40% of capital stock in an insurance company, and another 30% without voting rights. Individual holdings by foreign investors may not exceed 10% of capital stock, or up to 20% with authorization from the Secretariat of Finance and Public Credit. Effective control of the enterprise by Mexican shareholders is required. This provision applies to the UK prior to the entry into force of the EU-Mexico Free Trade Agreement.	GATS-Mexico
Insurance services	Selective	Investment by foreign governments or government representatives is not permitted.	GATS-Mexico
Insurance services	Selective	Some third-country firms have entered the market through U.S. or Canadian affiliates or subsidiaries. Mexico is otherwise closed to firms from other countries.	U.S. Embassy telegram
Insurance services	Universal	Product approval process is lengthy and innovative products are not approved.	Q
Insurance services	Universal	Tax regulators allow insolvent companies to write policies.	Q
Insurance services	Selective	Discriminatory application of surety tariff regulation adverses affects foreign firms.	Q
Investment services	Selective	Managers of pension funds for foreign subsidiaries in Mexico can not invest outside of Mexico.	Q
Legal services	Selective	Mexico has not established licensing procedures for U.S. and Canadian lawyers as FLCs, as required under Annex VI of the NAFTA.	U.S. Embassy telegram
Legal services	Selective	NFIC permission is required for investment greater than 49% in a Mexican legal services firm.	Foreign Investment Law of Mexico
Maintenance and repair of equipment except maritime vessels, aircraft and other transport equipment	Selective	Foreign investment is limited to 49% for firms that maintain and repair equipment, with the exception of maritime vessels, aircraft, and other transport equipment.	GATS-Mexico

Table D-53—*Continued*
Services: Mexican nontariff barriers

Affected services	Application	Alleged barrier	Source
Miscellaneous services	Selective	Foreign investment in the repair of footwear and other articles from leather and skins; electronic household appliances; clocks, watches, and jewelry; bicycles; and repair and cleaning of head gear is limited to 49%.	GATS-Mexico
Miscellaneous services	Selective	Foreign investment in locksmith services is limited to 49%. State and municipal authorities are responsible for granting concessions for such services.	GATS-Mexico
Retail services	Universal	Mexico restricts the retail trade in combustible liquid gas, charcoal, coal and other nonpetroleum-based fuels, paraffin, and gasoline and diesel fuel, firearms, cartridges, and tractolene ammunition.	GATS-Mexico
Retail services	Selective	Foreign firms are not permitted to invest in trade union and cooperative stores.	GATS-Mexico
Telecommunication services	Universal	Telmex control negotiation of settlement rates, which prevents other Mexican carriers from negotiating lower rates.	Q; NTE
Telecommunication services	Universal	Because of the lack of independent regulator, regulations to restrict the market abuses of Telmex have not been implemented.	Q; NTE
Telecommunication services	Selective	Mexico restricts foreign investment in facilities-based carriers, except cellular, to 49%.	GATS-Mexico; Q
Telecommunication services	Selective	Resellers may not be owned by public telecommunication concessionaires of foreign governments.	GATS-Mexico
Telecommunication services	Universal	Mexico requires international traffic to be routed through the facilities of an enterprise that has received an operating concession from the Ministry of Communications and Transport.	GATS-Mexico
Telecommunication services	Universal	Telecommunicaciones de Mexico retains exclusive rights to links with Intelsat and Inmarsat.	GATS-Mexico
Transport services	Selective	Foreign investment in airport and helicopter administration services is limited to 30%.	GATS-Mexico
Transport services	Selective	A concession from the government is required to operate an airport or port, and to provide maritime, port, subway, or tramway services. Mexican nationals have precedence over foreign nationals. Foreign investment is limited to 49% without prior authorization.	GATS-Mexico Mkacc
Telecommunication services	Universal	Telemex charges unjustifiably high interconnection fees.	Mkacc
Wholesale services	Universal	Mexico restricts wholesale trade in petroleum-based fuels, coal, firearms, cartridges and ammunition.	GATS-Mexico

Table D-54
Services products: U.S. nontariff barriers

Affected services	Application	Alleged barrier	Source
Accounting services	Universal	Sole proprietorships or partnerships are limited to persons licensed as accountants, except in Iowa where accounting firms must incorporate.	GATS-U.S.
Audiovisual services	Universal	A single company or firm is not permitted to own a combination of newspaper and broadcast stations serving the same local market.	FCC
Audiovisual services	Selective	Grants from the National Endowment for the Arts are only available for individuals with U.S. citizenship or permanent resident alien status and nonprofit companies.	GATS-U.S.
Audiovisual services	Selective	Radio and television licences may not be held by: a foreign government; a corporation chartered under the law of a foreign country or which has a non-U.S. citizen as an officer or director or more than 20% of the capital stock of which is owned or voted by non-U.S. citizens; a corporation chartered under the laws of the United States that is directly or indirectly controlled by a corporation more than 25% of whose capital stock is owned by non-U.S. citizens or a foreign government or a corporation of which any officer or more than 25% of the directors are non-U.S. citizens.	GATS-U.S.
Audiovisual services	Universal	The U.S. Copyright Act permits the playing of radio and television music in public places without payment of royalties, which is a violation of the TRIPS Agreement.	WTO
Banking and securities	Universal	The establishment of a branch by a foreign securities film to engage in broker-dealer activities is not practicable because the foreign firm incorporated outside the United States has to register and become subject to the Securities and Exchange Commission (SEC).	Mkacc
Banking and securities	Universal	Foreign mutual funds have not been able to make public offerings because the SEC's conditions make it impracticable to register under the Investment Company Act of 1940.	Mkacc
Banking and securities services	Selective	All directors of a national bank must be citizens unless a national bank is an affiliate or subsidiary of a foreign bank, in which case only a majority of the board need be citizens.	GATS-U.S.
Banking and securities services	Selective	Foreign ownership of Edge Corporations is limited to foreign banks and U.S. subsidiaries of foreign banks, while domestic non-bank firms may own such corporations.	GATS-U.S.

Table D-54—*Continued*
Services products: U.S. nontariff barriers

Affected services	Application	Alleged barrier	Source
Banking and securities services	Selective	Federal and State laws do not permit a credit union, savings bank, home loan or thrift business in the United States to be provided through branches of corporations organized under a foreign country's law.	GATS-U.S.
Banking and securities services	Selective	In order to accept or maintain domestic retail deposits of less than $100,000, a foreign bank must establish an insured banking subsidiary. This requirement does not apply to a foreign bank branch that was engaged in insured deposit-taking activities on December 19, 1991.	GATS-U.S.
Banking and securities services	Selective	U.S. citizenship is required for incorporators or organizers of depository financial institutions organized under state law. Residence within a state may also be required for directors, incorporators, organizers, or executive committee members of depository financial institutions organized under state law.	GATS-U.S.
Banking and securities services	Selective	Foreign banks are required to register under the Investment Advisers Act of 1940 to engage in securities advisory and investment management services in the United States. Domestic banks are exempt from registration. The registration requirement covers record maintenance, inspections, submission of reports and fees.	GATS-U.S.
Banking and securities services	Selective	Foreign banks cannot be members of the Federal Reserve system, and thus may not vote for directors of a Federal Reserve Bank. Foreign-owned bank subsidiaries are not subject to this measure.	GATS-U.S.
Banking and securities services	Universal	Federal law prohibits the offer or sale of futures contracts on onions, options contracts on onions, and options on futures contracts on onions in the United States, and services related thereto.	GATS-U.S.
Banking services	Selective	Since 1991, foreign banks have not been permitted to establish or acquire U.S. branches whose deposits are insured by the Federal Deposit Insurance Corporation other than through a U.S. bank subsidiary. A foreign bank may acquire an insured branch and convert t to wholesale, uninsured status, such branches must continue to comply with the Community Reinvestment Act.	Mkacc
Energy-related services	Universal	Any construction, operation, or maintenance of facilities for the development, transmission, and utilization of power on Federally controlled land or water must be licensed.	Mkacc

Table D-54—*Continued*
Services products: U.S. nontariff barriers

Affected services	Application	Alleged barrier	Source
Health services	Selective	Federal or State government reimbursement of medical expenses is limited to licensed, certified facilities in the United States or in a specific U.S. state.	GATS-U.S.
Health services	Universal	Establishment of hospitals or other health care facilities, procurement of specific types of medical equipment, or provision of specific types of medical procedures may be subject to needs-based quantitative limits.	GATS-U.S.
Insurance services	Selective	For insurance of maritime vessels built under federally guaranteed mortgage funds and insured by a foreign company, the insured must demonstrate that the risk was offered in the U.S. market before contracting with a foreign insurer.	GATS-U.S.
Insurance services	Selective	Foreign branches are not permitted to provide surety bonds for U.S. Federal Government contracts.	GATS-U.S.
Insurance services	Universal	All States require in-state residency for surplus lines brokers.	GATS-U.S.
Insurance services	Selective	Foreign insurance companies that specialize in the surplus lines market (large industrial, transport, or hard-to-place risks) must be “white-listed” by the National Association of Insurance Commissioners (NAIC) in order to operate on a cross-border basis. Requirements for listing include naming a U.S. attorney and lodging a trust fund in a U.S. bank of up to $60 million.	Mkacc
Insurance services	Universal	Each state has its own insurance regulatory structure and Federal law does not provide for the establishment of Federally licensed or regulated insurance companies. This results in different licensing, solvency, and operating requirements and is a significant impediment.	Mkacc
Insurance services	Selective	Prior to last year’s passage of the Financial Modernization Act, foreign insurance companies were not permitted to operate in the United States if they were affiliated outside the U.S. with a bank having a branch, agency, commercial lending company, or bank subsidiary in the United States, unless the bank decided to withdraw from the U.S. The new legislation has removed this barrier, but final implementing regulations for the legislation are still in process.	Mkacc
Legal services	Selective	Services must be supplied by a U.S. national.	GATS-U.S.
Legal services	Selective	U.S. citizenship is required to argue a case before the U.S. Patent and Trademark Office.	GATS-U.S.

Table D-54—*Continued*
Services products: U.S. nontariff barriers

Affected services	Application	Alleged barrier	Source
Professional services	Universal	Licensing of service suppliers, generally regulated at the State level, lacks transparency and differs from State to State. There is also an absence of a transparent regulatory regime.	Mkacc
Retail and wholesale services	Universal	The United States restricts trade in alcoholic beverages, firearms and military equipment.	GATS-U.S.
Satellite launch services	Selective	The Commercial Space Act of 1998 requires Federal agencies buy these services from U.S. commercial providers, with certain exceptions.	Mkacc
Shipping services	Selective	Foreign investment in coastal and domestic shipping, including dredging, salvaging, or supply transport from a point in the United States to an offshore drilling rig or platform, is restricted. Foreign investors must form a U.S. subsidiary for exploitation of deep-water ports.	Mkacc
Telecommunication services	Selective	Licenses for cable landings are only granted to applicants in partnership with U.S. entities	Mkacc
Telecommunication services	Universal	Comsat is the sole U.S. access provider to the Intelsat and Imarsat space segments. As a result, it is difficult for other firms to provide services based on Intelsat and Imarsat.	Mkacc
Telecommunication services	Universal	FCC approval of mergers is complicated by burdensome approval by U.S.-law enforcement and National Security agencies.	Q
Telecommunication services	Selective	Law enforcement and National Security agencies impose personnel limitations as a condition of license transfers to non-U.S. companies acquiring FCC-regulated companies.	Q
Telecommunication services	Selective	The United States retains partial restrictions on foreign access to satellite-based services.	GATS-U.S.
Telecommunication services	Selective	The United States does not accord full market access and national treatment in the U.S. market for Direct-to-Home, Direct Broadcast Satellite, and satellite-based digital audio services.	GATS-U.S.; Mkacc
Telecommunication services	Selective	Foreign direct investment in common carrier radio licences is limited to 20% of firm equity.	GATS-U.S.; Mkacc
Transport services	Selective	The Federal Aviation Act of 1958 prohibits foreign investors from owning more than 49% of a U.S. carrier and restricts the holding of voting stock to 25%.	Mkacc

Table D-54—*Continued*
Services products: U.S. nontariff barriers

Affected services	Application	Alleged barrier	Source
Transport services	Selective	Transportation of passengers and cargo, funded by the U.S. Government must be performed by U.S. carriers. This includes all items procured for or owned by the military, cargoes generated by U.S. Government loans, and at least 75% of agricultural cargoes under certain foreign assistance programs.	Mkacc
Transport services	Selective	U.S. carriers may not lease foreign aircraft with flight crew. Applications by foreign carriers to lease third country aircraft with flight crew for use on routes to the United States are subject to a "public interest" test.	Mkacc
Transport services	Selective	Foreign built or rebuilt vessels are prohibited from engaging in coastwise trade either directly between two points of the United States, including island territories and possessions, or via a foreign port. No foreign built vessels can be documented and registered for dredging, towing or salvaging in the United States.	Mkacc

APPENDIX E
The GTAP Model

The GTAP Model

The GTAP model is a static general equilibrium model consisting of a documented global data base on international trade, country and regional interindustry relationships, national income accounts, and a standard modeling framework to organize and analyze the data.[1] It allows for comparisons of the global economy in two environments—one in which the base values of policy instruments such as tariffs or export restrictions are unchanged, and another in which these measures are changed—or "shocked"—to reflect the policies that are being studied. A change in policy makes itself felt throughout the countries or regions depicted in the model. The model says nothing about the speed with which changes occur, about what has happened to various dimensions of the economies in the meanwhile, or what may have happened to change some of the underlying dynamic structures of the economies, such as specific patterns of foreign direct investment or technological changes that may alter the future growth pattern of economies.

Results from the GTAP model are based upon established global trade patterns. This means that the model is unable to estimate changes in trade in commodities that have not been historically traded. That is to say, if zero trade now exists between two countries for a particular commodity, the model will assume that there will always be no trade in that commodity. Furthermore, patterns of trade may exist for such reasons as the distance between countries or cultural preferences. The GTAP model does not directly account for historically or culturally established trade patterns. In particular, the model will realistically tend to show smaller effects of policy changes operating on smaller trade flows, and larger effects on larger flows.

In the GTAP model, domestic products and imports are consumed by firms, governments, and households. Product markets are assumed to be perfectly competitive (implying zero economic profit for the firm), with imports as imperfect substitutes for domestic products (i.e., consumers are aware of the source of the products and may distinguish between them based on the foreign or domestic origin), and sectoral production determined by global demand and supply of the output.

Regions and Sectors in the Model

The current version of the GTAP database (version 4) covers trade in 50 commodity aggregates, or GTAP sectors, among 45 countries and regions. For the purpose of this analysis, the database has been aggregated to six regions and 10 commodity groups as follows:

[1] For further information, see T.W. Hertel (ed.), *Global Trade Analysis: Modeling and Application*. Cambridge: Cambridge University Press, 1997.

Commodity and regional aggregation

Commodity Aggregation	Regional Aggregation
Agriculture	Canada
Mining	Mexico
Processed food	United States
Textiles and apparels	UK
Iron and steel	Rest of the EU
Machinery and equipment	Rest of the world
Transport Equipment	
Chemical, rubber, and plastic	
Other manufactures	
Services[1]	

[1] The GTAP database contains only a limited and highly aggregated representation of the services sector. Unlike the other sectors in the database, services are not fully tradable and the border measures captured in the GTAP protection data do not fully represent the actual restrictions to trade in services.

Sectoral Composition

Sectoral Aggregation	GTAP Sectors
Agriculture	Paddy, rice, wheat, cereal grains nec, vegetables, fruit, nuts, oil seeds, sugar cane, sugar beet, plant-based fibers, crops nec, cattle, sheep, goats, horses, animal products nec, raw milk, wool, silk-worm cocoons, forestry, fishing, meat (cattle, sheep, goats, horse).
Mining	Minerals nec, coal, mineral products nec, petroleum, coal products, gas, oil.
Processed food	Vegetable oils and fats, meat products nec, sugar, processed rice, dairy products, beverages and tobacco products, food products nec.
Textiles and apparels	Textiles, wearing apparel.
Iron and steel	Metal products, metals nec, ferrous metals.
Machinery and equipment	Machinery and equipment nec, electronic equipment.
Transport equipment	Transport equipment nec, motor vehicles and parts.
Chemical, rubber, and plastic	Chemical, rubber, plastic products.
Other manufactures	Manufactures nec, leather products, wood products, paper products, publishing.
Services	Gas manufacture, distribution, water, dwellings, public administration, defense, education, health, electricity, construction, finance, business, rec service, trade, transportation.

GTAP Model Trade Data

In addition to the data on trade in each of the commodities between each pair of countries or regions in the model, there are data on the domestic production and use of each commodity (including use in the production of other commodities), the supply and use of land, labor, capital, the population, and GDP. The database also contains information on tariffs, some nontariff barriers, and other taxes. However, information on the services sector is limited and highly aggregated. An additional component of the data is a set of parameters which, in the context of the model's equations, determine its behavior. These are principally a set of elasticity values that determine, among other things, the extent to which imports and domestically produced goods are substitutes for one another.

The standard GTAP database is based on the year 1995–i.e., trade flows and barriers, population and other data refer to the world in that year. For the purpose of the present study, the standard data set was modified to reflect an environment in which all policy measures ratified under the Uruguay Round, NAFTA, the Information Technology Agreement (ITA) and the recent EU-Mexico Free Trade Arrangement are completely implemented. This updated data set is used as the base data for the current analysis. Thus, all results reported here should be interpreted as if the FTA took place in 1995, all its effects were felt immediately, and the Uruguay Round, the NAFTA, the ITA, and the EU-Mexico FTA had already been implemented. The specifics of the adjustments to the original GTAP database follow.

Tariff cuts associated with the Uruguay Round were taken from Francois and Strutt (1999).[2] With respect to the NAFTA liberalization, trade between Canada, Mexico and the United States is scheduled to be fully liberalized (with a few exceptions) by 2003. Hence, it is assumed for this analysis that all trade barriers between the three NAFTA members have been completely removed.

The Ministerial Declaration on Trade in Information Technology Products (ITA) was concluded at the Singapore Ministerial Conference in December 1996.[3] At that time, 29 countries (including the 15 EC member states) countries or separate customs territories signed the declaration. The ITA is solely a tariff cutting mechanism that will cut customs duties on computer and telecommunications products. There is no binding commitments concerning NTBs. The commitments undertaken under the ITA in the WTO are on an MFN basis, and therefore benefits accrue to all other WTO Members. ITC staff has determined that the goods that qualify for tariff elimination under ITA makes up for about 10 percent of each of Canadian, EU (including the UK), and U.S. importation of machinery and equipment. The number used for the rest of the world is 5 percent. Mexico is not one of the signatories of the declaration.

The EU-Mexico FTA is the most ambitious FTA ever negotiated by the EU and the first such agreement with a Latin American partner.[4] It covers all the areas of EU-Mexico trade relations. By 2007, EU exports to Mexico will be granted similar treatment to that enjoyed by the United States and Canada. The bulk of Mexican exports to the EU will enter duty free in 2003. For the purpose of the current investigation, it is assumed that all trade barriers between the EU and Mexico have been completely removed.

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[2] Francois, Joseph and Anna Strutt, "Post Uruguay Round Tariff Vectors for GTAP Version 4" mimeo, Erasmus University, January 1999.

[3] Detailed schedules and list of the signatories of declaration are available on the internet at *http://www.wto.org/wto/goods/infotech.htm*, accessed June 7, 2000.

[4] The text of the agreement is available on the internet at *http://europa.eu.int/comm/trade/bilateral/mexico/fta.htm*, accessed June 7, 2000.

APPENDIX F
Methodology for Partial Equilibrium Analysis

Methodology For Partial Equilibrium Analysis

This appendix describes in detail the methodology used in the Commission's partial-equilibrium analysis of the effects of a free trade agreement between the United Kingdom and United States on U.K.-owned direct investment in the United States and U.S.-owned direct investment in the United Kingdom, as presented in Chapter 4. The Commission's sector-level analysis focuses on the likely impact of such an agreement on sales of manufacturing affiliates financed by UK direct investment in the United States and U.S. direct investment in the United Kingdom.

Economic Structure of the Analysis

This analysis utilizes a log-linear partial equilibrium model,[1] which analyzes the simultaneous removal of three types of import duties- imports that compete with domestically produced output, imports used in the production of domestically produced output, and import duties imposed by another country when domestically produced output is exported. The model also can be used to examine the imposition or increase of a tariff, as in Scenario II described in the text. There are two varieties of domestically produced output; subject output, which is produced by multinational firms based in another country (e.g., U.S.-owned multinationals in the UK, or UK-owned multinationals in the United States), and other output, which is produced either by domestically owned firms or foreign-owned firms from third countries. Similarly, there are two varieties of imports-imports from the subject country, for which the tariff is removed, and imports from other countries. Exports can be destined either for the subject country, for which the tariff is removes, or for the rest of the world. In each market, subject output, other output, subject imports, and other imports are treated as imperfect substitutes. Exports face downward-sloping demand curves in the market in which they are sold.

Each variety of output in each market is affected by three types of tariffs, all of which can be modified simultaneously in the model. These are (1) the tariff on liberalized imports from the FTA partner (imports from the United Kingdom in the U.S. market, and vice versa); (2) the tariff on liberalized exports to the FTA partner, and (3) the tariff on purchased inputs from the FTA partner. Each of the three tariffs removed in the first scenario involving tariff elimination between the United Kingdom and the United States takes a different value, because the U.S. and UK tariff schedules are different, and the goods purchased as inputs are different from the final good produced. For example, in the analysis of UK-owned FDI in the U.S. chemical products industry, the tariff charged by the United States on chemicals for final demand from the United Kingdom, the tariff charged by the United States on inputs to the chemical industry purchased from the United Kingdom (some of which are nonchemicals), and the tariff charged by the United Kingdom on chemicals exported to the United Kingdom are all different. A certain fraction of the costs of production consists of intermediate goods imported from the FTA partner. Both varieties of output are produced using such imported inputs, combined with an aggregate input reflecting labor and all other costs.

In the second scenario, which involves combining tariff elimination between the United Kingdom and the United States with the imposition of a tariff between the United Kingdom and the European Union at the current EU level, subject trade flows between the United Kingdom, on the one hand, and the

[1] For a general reference on this category of models, see Joseph F. Francois and H. Keith Hall (1997), "Partial Equilibrium Modeling," Chapter 5 in Joseph F. Francois and Kenneth A. Reinert, eds., *Applied Methods for Trade Policy Analysis,* London: Cambridge University Press, pp. 122-155

United States and EU on the other, are aggregated. The tariff change is figured as the weighted average of the tariff drop cut involving the U.S. market and the tariff increase involving the EU market. This procedure permits a single set of equations for subject trade to represent the effects of trade policy changes affecting two different partners.

Each of the products sold in the domestic market (subject domestic output produced by the foreign multinational, other domestic output, subject imports, and other imports), has a distinct market in which equilibrium prices and quantities are established. The market for each of these products is depicted by the following log-linear, constant-elasticity, demand and supply system:

$$\ln(Q_i) = \ln(k_i) + \eta_i \ln(P_i) + \sum_{j \neq i} \eta_{ij} \ln(P_j) \quad (1)$$

$$\ln(Q_i) = \varepsilon_i \ln(P_i) \quad (2)$$

The subscripts $i, j \in \{1, 2, 3\}$ refer to the U.S. (or UK) domestic product, imports from the UK (or United States) and other imports, respectively. Equation (1) represents demand, while equation (2) represents supply for each of the three products. Q_i and P_i are the equilibrium quantities and prices for each of the three products; η_i is the uncompensated own-price demand elasticity for good i; η_{ij} is the uncompensated cross-elasticity of demand for good i with respect to price j; ε_i is the price elasticity of supply for each product in the domestic market; and k_i is a constant term.

Equation (2) includes the total supply for both domestic and export markets. The export supply is simply the residual supply not sold in the domestic market. The demand for the goods in the two export markets (subject and rest-of-world) is downward-sloping with respect to own price only; thus, the summation term on the right-hand side of equation (1) is omitted.

The share of costs accounted for by subject (imported) intermediate inputs is fixed at its level in the base data; this can be reconciled with either a Leontief or a Cobb-Douglas production structure in which subject intermediate inputs and other inputs are used to produce final output. Both subject intermediate inputs and other inputs are produced according to supply functions similar to equation (2). Increases and decreases in the tariff on subject intermediate inputs are reflected in shifts of the supply curve of final domestic output, corresponding to the increase in costs induced by the tariff change. The cost share of intermediate imports is a fixed proportion, set by the base data. The increase in costs induced by an identical tariff change for subject domestic output and other domestic output may be different, since the cost share of the imported intermediate input is different.

Data

The data are calibrated for a base year of 1997, the most recent year for which a matching set of data elements was available. Total output for each sector modeled is taken from the OECD's *STAN Database for Industrial Analysis.* In the analysis of the U.S. market, output of UK-owned multinationals is taken from Department of Commerce, Bureau of Economic Analysis, *Foreign Direct Investment in the United States: Preliminary Results from the 1997 Benchmark Survey,* and other

output calculated as a residual.[2] In the analysis of the UK market, output of U.S.-owned multinationals is taken from Department of Commerce, Bureau of Economic Analysis, *U.S. Direct Investment Abroad: Operations of U.S. Parent Companies and their Foreign Affiliates, Preliminary 1997 Estimates*. For output and for other BEA series, data for all non-bank affiliates (Table II data) is used whenever possible. Some observations in the published BEA data are suppressed due to disclosure reasons. In this case, published data for majority-owned affiliates (Table III data) are used when available, as the totals for these are usually close to those for all nonbank affiliates. When both Table II and Table III data are suppressed, the suppression covers two or more observations at a similar level of aggregation. The suppressed elements are then estimated by allocating the total of the suppressed elements among the individual elements using row (industry) or column (country) totals at the next higher level of aggregation.

For the analysis of the U.S. market, data for aggregate trade and for trade with the United Kingdom are taken from U.S. Commerce Department sources. Data for total exports and intermediate imports of UK-owned Multinational Corporations in the United States is taken from the BEA's FDIUS data; exports of UK-owned Multinationals to the foreign parent group is used to proxy exports of UK-owned MNCs to the UK. The intermediate imports from the United Kingdom of other (nonsubject) firms are estimated by taking all UK exports to the United States at the 1-digit SITC level (from the *World Trade Analyzer* database produced by Statistics Canada), concording these with categories in the U.S. input-output table for 1992, and assigning a certain share of these imports to intermediate goods in each of the 11 sectors of analysis using ratios from the U.S. input-output table. Intermediate imports of other firms in each sector are generated by subtracting imports of UK-owned affiliates as found in the BEA data. Other trade data elements, such as trade with the rest of the world, are calculated as residuals.

For the analysis of the UK market, data for aggregate exports is taken from STAN for 1996, adjusted for growth of aggregate exports of all commodities from 1996 to 1997. Data for aggregate imports and for exports and imports between the UK and either the UK or EU is taken from the U.N. COMTRADE database. Data for exports of U.S.-owned firms to the United States and intermediate imports of U.S.-owned firms from the United States are taken from the BEA's USDIA data. Exports of U.S.-owned firms to the European Union are calculated as a share of sales to third markets, based on historical market shares for aggregate trade in the sector. Intermediate-goods imports of firms other than U.S.-owned firms are estimated using a procedure similar to that used in the analysis of the U.S. market, using the ratios in the U.S. input-output table on the assumption that production technologies in both markets are similar. Total intermediate-goods imports from the EU are allocated between subject (U.S.-owned) and nonsubject firms according to their shares in output.

The WTO's *Integrated Data Base* was used to aggregate the MFN tariff schedules of the United States and the European Union (i.e., the United Kingdom) to the level of aggregation used in the study. The import tariff in the U.S. market is the same as the tariff facing exports from the UK market to the U.S. market, and vice versa. The tariff on intermediate goods was calculated as a weighted average of the 1-digit SITC tariffs on each type of intermediate input used in the output of each sector, using the same weights as used to calculate the value of nonsubject intermediate imports.

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[2] In the case of "other industry" in the UK market, the joint use of total output, subject output, and trade data from different sources implied that the output produced by "other" (mainly domestic) sources for the domestic market was negative. In this case, total output was adjusted upward to give reasonable results.

APPENDIX G
Sector Concordance for Partial Equilibrium Analysis

Sector Concordance For Partial Equilibrium Analysis

For each of the 11 sectors in the analysis, this concordance defines the International Standard Industry Classification (ISIC) sector used for the OECD's STAN database, the product categories from the BEA's U.S. Direct Investment Abroad (USDIA) data for U.S. affiliates in the United Kingdom, the product categories from the BEA's Foreign Direct Investment in the United States (FDIUS) data (for U.K. affiliates in the United States), and the Harmonized Tariff System (HTS) categories for tariff and trade data. Note that the HTS categories used for U.S. affiliates in the United Kingdom and U.K. affiliates in the United States are slightly different.

Table G-1
Sector concordance

Sector name	ISIC (STAN)	BEA (USDIA)	BEA (FDIUS)	HTS	Notes
Food, beverages, tobacco	31	Food and kindred products	Food	9,12-24	
		Other/tobacco	Beverages and tobacco		
Textiles, apparel, leather	32	Other/textile products and apparel	Textiles, apparel, and leather products	41-43,50-65	for USDIA, omit 41-43,64
		Other/other/leather and leather products			
Wood, furniture	33	Other/lumber, wood, furniture and fixtures	Wood products	44,45,94	
			Furniture and related products		
Paper, printing, publishing	34	Other/paper and allied products	Paper	47-49	
		Other/printing and publishing	Printing and related support activities		
			Information/publishing industries		
Chemical products	35	Petroleum/petroleum and coal products	Petroleum and coal products	29-40	
		Chemicals and allied products	Chemicals		
		Other/rubber products	Plastics and rubber products		
		Other/miscellaneous plastic products			
Non-metallic minerals	36	Other/glass products	Nonmetallic mineral products	68-70	
		Other/stone, clay, and other nonmetallic mineral products			
Primary and fabricated metals	37, 381	Primary and fabricated metals	Primary and fabricated metals	72-83	

Table G-1—*Continued*
Sector concordance

Sector name	ISIC (STAN)	BEA (USDIA)	BEA (FDIUS)	HTS	Notes
Industrial machinery and equipment (including computers)	382	Industrial machinery and equipment	Machinery	8401-8406,8410-8485	
			Computers and electronic products/computer and peripheral equipment		
Electronic and other electrical equipment	383	Electronic and other electrical equipment	Computers and electronic products/communications equipment	85	
			Computers and electronic products/audio and video equipment		
			Computers and electronic products/semiconductors and other electronic components		
			Computers and electronic products/magnetic and optical media		
			Electrical equipment, appliances, and components		
Transport equipment	384	Transport equipment	Transportation equipment	8407-09,86-89	
Other manufacturing	385, 39	Other/instruments and related products	Computers and electronic products/navigational, measuring, and other instruments	46,66,67,71,90-93,95-97	for USDIA, add 41-43,64
		Other/other/miscellaneous manufacturing industries	Miscellaneous manufacturing		

APPENDIX H
Witnesses at USITC Hearing

Calendar of Public Hearing
April 11, 2000

Those listed below will appear as witnesses at the United States International Trade Commission's hearing:

Subject:	THE IMPACT ON THE U.S. ECONOMY OF INCLUDING THE UNITED KINGDOM IN A FREE TRADE ARRANGEMENT WITH THE UNITED STATES, CANADA, AND MEXICO
Inv. No.:	332-409
Date and Time:	April 11, 2000 - 9:30 a.m.

Sessions will be held in connection with the investigation in the Main Hearing Room 101, 500 E Street, S.W., Washington, D.C.

Congressional appearance:

The Honorable Phil Gramm, U.S. Senator, State of Texas

ORGANIZATION AND WITNESS

Robinson International
Chicago, Illinois

Honorable Paul H. Robinson, Jr., Chairman,
Robinson International

Honorable Conrad M. Black, Chairman,
Telegraph Group Limited, London

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