

Potential Impact on the U.S. Economy and Industries of the GATT Uruguay Round Agreements

Investigation No. 332-353

Volume I

Antigua and Barbuda Argentina Australia Austria
 Bahrain Bangladesh Barbados Belgium Belize Benin
 Bolivia Botswana Brazil Brunei Darussalam
 Burkina Faso Burundi Cameroon Canada Central
 African Republic Chad Chile Colombia Congo Costa
 Rica Cote d' Ivoire Cuba Cyprus Czech Republic
 Denmark Dominican Republic Egypt El Salvador
 Fiji Finland **ambia** **Germany** **Ghana**
 Gree yin ong Kong Hun-
 n • Indones• Israel Italy
 enya Kore f Kuwait
 rg Macau alawi
 dives Malta Mau ritus
 orocco Mozambique M ibia
 a nds New Zealand Nicarag ria
 No y Pakistan Paraguay Peru P
 El/Woman ia Rwanda Saint Lu nt
 'e Grtedines Senegal Sierra L- re
 • South Africa Spain Sri ka
 Sun eden Switzerland Ta nia
 Thai! ago Tunisia key
 Ugan nited Sia s of
 A meri ambia Zi • abwe

U.S. International Trade Commission

COMMISSIONERS

Don E. Newquist, Chairman

Peter S. Watson, Vice Chairman

David B. Rohr

Carol T. Crawford

Janet A. Nuzum

Lynn M. Bragg

Robert A. Rogowsky
Director of Operations

Vern Simpson
Director of Industries

**Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436**

POTENTIAL IMPACT ON THE U.S. ECONOMY AND SELECTED INDUSTRIES OF THE GATT URUGUAY ROUND AGREEMENTS

Project Staff

Project Leaders

Mark Estes, Karen Laney-Cummings

Assistant Project Leader

Stephanie Kaplan

Administrative and Support Services

Keven Blake, Joyce Bookman, Clifford Brown, Pamela Dyson, Paulette Henderson, Steven Hudgens, Kathy Loughney, Hans Miller, Cindy Payne, Andrew Rylyk, Wanda Tolson and the Systems Development and Integration Division

Sector Authors

U.S. Economy

Hugh Arce, Theodore To

Agriculture, Fishery, and Forestry Sectors

Alfred Dennis, Lee Frankel, Joan Gallagher, Amy Harney, Cathy Jabara, David Ludwick, Doug Newman, John Pierre-Benoist, John Reeder, Rick Rhodes, C.B. Stahmer, Rose Steller, Joan Williams

Energy and Chemicals Sectors

Cynthia Foreso, Aimison Jonnard, Eric Land, Denby Misurelli, Elizabeth Nesbitt, James Raftery, Stephen Wanser

Textile, Apparel, and Footwear Sectors

Linda Shelton, Sundar Shetty, Mary Elizabeth Sweet, Robert Wallace

Minerals and Metals Sectors

James Brandon, Vincent DeSapio, James Lukes, David Lundy, Peg MacKnight, Linda White

Machinery and Transportation Sectors

Peder Andersen, John Cutchin, Dennis Fravel, William Greene, Michael Hagey, Georgia Jackson, Kathleen Lahey, Ruben Mata, Adam Topolansky

Electronics Sectors

Scott Baker, Julie Bringe, Lori Hylton, Chris Johnson, John Kitzmiller, Andrew Malison, Ruben Moller, Douglas Puffert

Miscellaneous Manufactures Sectors

Dana Abrahamson, Gail Burns, Carl Seastrum, Josephine Spalding, Richardo Witherspoon

Service Sectors

John Kitzmiller, Dennis Luther, Leonard Sloane, Laura Stonitsch

PREFACE

Following receipt on March 23, 1994, of a request from the House Committee on Ways and Means and the Senate Committee on Finance (appendix A), the U.S. International Trade Commission instituted investigation No. 332-353, *Potential Impact on the U.S. Economy and Industries of the GATT Uruguay Round Agreements*, under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)), on March 25, 1994. The purpose of this report is to analyze the impact of the Uruguay Round Agreements of the General Agreement on Tariffs and Trade on the U.S. economy, focusing on important agricultural, industrial, and service sectors.

Copies of the notice of investigation were posted in the Office of the Secretary, U.S. International Trade Commission, Washington, DC 20436, and the notice was published in the *Federal Register* (59 *F.R.* 15218) on March 31, 1994 (appendix B). Interested parties were invited to submit written statements concerning the investigation.

The information and analysis in this report are for the purpose of this report only. Nothing in this report should be construed to indicate how the Commission would find in an investigation conducted under other statutory authority covering the same or similar matters.

TABLE OF CONTENTS

	<i>Page</i>
Preface	iii
Executive summary	xix
Part 1. Introduction	I-1
Chapter 1. Introduction	1-3
Purpose and scope of study	1-3
Overview of the agreements	1-3
Methodologies	1-4
Economywide assessment	1-4
Sector-level assessments	1-4
Organization of the report	1-7
Chapter 2 Likely impact of the URA on the U.S. economy	1-9
Theoretical implications of multilateral trade liberalization	1-9
Comparison of models used in existing studies of the	
Uruguay Round	1-9
Partial equilibrium models	I-11
Macroeconometric models	I-11
CGE models	I-11
Estimated economywide impact of the URA	1-12
Impact on national income	I-12
Impact on trade	1-13
Impact on aggregate employment	1-14
Impact on consumers	1-14
Conclusion	I-14
Part II. Likely impact of the URA on U.S. agriculture,	
 fishery, and forestry sectors	II-1
Summary of the likely impact of the URA on U.S. agriculture,	
fishery, and forestry sectors	11-3
Chapter 3. Agreement on agriculture	II-5
Market access	11-5
Reductions in existing tariffs	11-5
Tariffication of nontariff barriers	11-5
Other market access commitments	II-6
Export subsidies	II-6
Internal support	11-7
Peace clause	11-7
Sanitary and phytosanitary measures	11-8
U.S. industry positions on the URA	II-8
Chapter 4. Livestock and meat	11-9
Summary of sector analysis and U.S. competitive position	11-9
Key Uruguay Round provisions affecting sector	II-10
Tariff provisions	II-10
Other provisions	II-10
Likely impact on U.S. trade	II-11
Likely impact on U.S. production, employment, and consumers	II-11
U.S. industry positions on the URA	II-12

TABLE OF CONTENTS-Continued

	<i>Page</i>
Part II. Likely impact of the URA on U.S. agriculture, fishery, and forestry sectors—Continued	
Chapter 5. Poultry and eggs	..... II-13
Summary of sector analysis and U.S. competitive position	..... II-13
Key Uruguay Round provisions affecting sector	.....II-14
Tariff provisions	..... II-14
Other provisions	..... II-15
Likely impact on U.S. trade	..... II-15
Likely impact on U.S. production, employment, and consumers	..... II-15
U.S. industry positions on the URA	..... II-15
Chapter 6. Dairy	..... II-17
Summary of sector analysis and U.S. competitive position	..... II-17
Key Uruguay Round provisions affecting sector	..... II-18
Tariff provisions	..... II-18
Other provisions	..... II-19
Likely impact on U.S. trade	..... 11-20
Likely impact on U.S. production, employment, and consumers	..... 11-20
U.S. industry positions on the URA	..... 11-20
Chapter 7. Fish	..... 11-21
Summary of sector analysis and U.S. competitive position	..... 11-21
Key Uruguay Round provisions affecting sector	..... 11-22
Tariff provisions	..... 11-22
Other provisions	..... 11-22
Likely impact on U.S. trade	.....11-22
Likely impact on U.S. production, employment, and consumers	..... 11-23
U.S. industry positions on the URA	..... 11-23
Chapter 8. Sugar, other sweeteners, and ethanol	..... 11-25
Summary of sector analysis and U.S. competitive position	..... 11-25
Key Uruguay Round provisions affecting sector	..... 11-26
Tariff provisions	..... 11-26
Other provisions	..... 11-27
Likely impact on U.S. trade	..... 11-27
Likely impact on U.S. production, employment, and consumers	..... 11-27
U.S. industry positions on the URA	..... 11-28
Chapter 9. Fruit and vegetable products	.....11-29
Summary of sector analysis and U.S. competitive position	..... 11-29
Key Uruguay Round provisions affecting sector	..... 11-30
Tariff provisions	..... 11-30
Other provisions	..... 11-30
Likely impact on U.S. trade	..... II-31
Likely impact on U.S. production, employment, and consumers	..... 11-32
U.S. industry positions on the URA	..... 11-32
Chapter 10. Grain, milled grain, and animal feed	..... 11-33
Summary of sector analysis and U.S. competitive position	..... 11-33
Key Uruguay Round provisions affecting sector	..... 11-34
Tariff provisions	..... 11-34
Other provisions	..... 11-34
Likely impact on U.S. trade	..... 11-35
Likely impact on U.S. production, employment, and consumers	..... 11-35
U.S. industry positions on the URA	..... 11-36

TABLE OF CONTENTS-Continued

	<i>Page</i>
Part II. Likely impact of the URA on U.S. agriculture, fishery, and forestry sectors—Continued	
Chapter 11. Oilseed and oilseed products	..... 11-37
Summary of sector analysis and U.S. competitive position	..... 11-37
Key Uruguay Round provisions affecting sector	..... 11-38
Tariff provisions	..... 11-38
Other provisions	..... 11-38
Likely impact on U.S. trade	..... 11-39
Likely impact on U.S. production, employment, and consumers	..... 11-39
U.S. industry positions on the URA	..... 11-40
Chapter 12. Beverages	..... 11-41
Summary of sector analysis and U.S. competitive position	..... 11-41
Key Uruguay Round provisions affecting sector	..... 11-42
Tariff provisions	..... 11-42
Other provisions	..... 11-42
Likely impact on U.S. trade	..... 11-43
Likely impact on U.S. production, employment, and consumers	..... 11-43
U.S. industry positions on the URA	..... 11-44
Chapter 13. Tobacco and Tobacco products	..... 11-45
Summary of sector analysis and U.S. competitive position	..... 11-45
Key Uruguay Round provisions affecting sector	..... 11-46
Tariff provisions	..... 11-46
Other provisions	..... 11-46
Likely impact on U.S. trade	..... 11-47
Likely impact on U.S. production, employment, and consumers	..... 11-47
U.S. industry positions on the URA	..... 11-47
Chapter 14. Tropical and specialty agriculture products	..... 11-49
Summary of sector analysis and U.S. competitive position	..... 11-49
Key Uruguay Round provisions affecting sector	..... 11-50
Tariff provisions	..... 11-50
Other provisions	..... 11-50
Likely impact on U.S. trade	..... 11-51
Likely impact on U.S. production, employment, and consumers	..... 11-51
U.S. industry positions on the URA	..... 11-51
Chapter 15. Wood and lumber products	..... 11-53
Summary of sector analysis and U.S. competitive position	..... 11-53
Key Uruguay Round provisions affecting sector	..... 11-54
Tariff provisions	..... 11-54
Other provisions	..... 11-54
Likely impact on U.S. trade	..... 11-55
Likely impact on U.S. production, employment, and consumers	..... 11-55
U.S. industry positions on the URA	..... 11-55
Chapter 16. Paper, pulp, and printed matter	..... 11-57
Summary of sector analysis and U.S. competitive position	..... 11-57
Key Uruguay Round provisions affecting sector	..... 11-58
Tariff provisions	..... 11-58
Other provisions	..... 11-58
Likely impact on U.S. trade	..... 11-58
Likely impact on U.S. production, employment, and consumers	..... 11-59
U.S. industry positions on the URA	..... 11-59

TABLE OF CONTENTS-Continued

	<i>Page</i>
Part II. Likely impact of the URA on U.S. agriculture, fishery, and forestry sectors—Continued	
Chapter 17. Cotton	.....11-61
Summary of sector analysis and U.S. competitive position	..... 11-61
Key Uruguay Round provisions affecting sector	..... 11-62
Tariff provisions	..... 11-62
Other provisions	..... 11-62
Likely impact on U.S. trade	..... 11-63
Likely impact on U.S. production, employment, and consumers	..... 11-63
U.S. industry positions on the URA	..... 11-63
 Part III. Likely impact of the URA on U.S. energy and chemicals sectors	 III-1
Summary of the likely impact of the URA on U.S. energy and chemicals sectors	..... III-3
Chapter 18. Energy and related products	..... 111-5
Summary of sector analysis and U.S. competitive position	..... 111-5
Key Uruguay Round provisions affecting sector	..... 111-6
Tariff provisions	..... 111-6
Other provisions	..... 111-6
Likely impact on U.S. trade	..... 111-6
Likely impact on U.S. production, employment, and consumers	..... 111-6
U.S. industry positions on the URA	..... 111-6
Chapter 19. Primary aromatic chemicals and olefins	..... III-9
Summary of sector analysis and U.S. competitive position	..... III-9
Key Uruguay Round provisions affecting sector	..... III-10
Tariff provisions	..... III-10
Other provisions	..... III-10
Likely impact on U.S. trade	..... III-10
Likely impact on U.S. production, employment, and consumers	..... III-10
U.S. industry positions on the URA	..... III-10
Chapter 20. Agricultural chemicals	..... III-13
Summary of sector analysis and U.S. competitive position	..... III-13
Key Uruguay Round provisions affecting sector	..... III-14
Tariff provisions	..... III-14
Other provisions	..... III-14
Likely impact on U.S. trade	..... III-14
Likely impact on U.S. production, employment, and consumers	..... III-15
U.S. industry positions on the URA	..... III-15
Chapter 21. Miscellaneous finished chemical products	..... III-17
Summary of sector analysis and U.S. competitive position	..... III-17
Key Uruguay Round provisions affecting sector	..... III-18
Tariff provisions	..... III-18
Other provisions	..... III-18
Likely impact on U.S. trade	..... III-18
Likely impact on U.S. production, employment, and consumers	..... III-19
U.S. industry positions on the URA	..... III-19

TABLE OF CONTENTS-Continued

	<i>Page</i>
Part III. Likely impact of the URA on U.S. energy and chemicals sectors—Continued	
Chapter 22. Pharmaceuticals	III-21
Summary of sector analysis and U.S. competitive position	111-21
Key Uruguay Round provisions affecting sector	111-22
Tariff provisions	111-22
Other provisions	111-23
Likely impact on U.S. trade	111-23
Likely impact on U.S. production, employment, and consumers	111-23
U.S. industry positions on the URA	111-23
Chapter 23. Rubber, plastics, and products thereof	111-25
Summary of sector analysis and U.S. competitive position	111-25
Key Uruguay Round provisions affecting sector	111-26
Tariff provisions	111-26
Other provisions	111-27
Likely impact on U.S. trade	111-27
Likely impact on U.S. production, employment, and consumers	111-27
U.S. industry positions on the URA	111-27
Chapter 24. Miscellaneous chemicals	111-29
Summary of sector analysis and U.S. competitive position	111-29
Key Uruguay Round provisions affecting sector	111-30
Tariff provisions	111-30
Other provisions	111-30
Likely impact on U.S. trade	111-30
Likely impact on U.S. production, employment, and consumers	III-31
U.S. industry positions on the URA	III-31
 Part IV. Likely impact of the URA on U.S. textile, apparel, and footwear sector	 IV-1
Summary of the likely impact of the URA on U.S. textile, apparel, and footwear sector	IV-3
Chapter 25. Agreement on textiles and clothing	IV-5
Main elements of the agreement	IV-5
Product integration and accelerated quota growth	IV-5
Safeguards	IV-6
Circumvention	IV-6
Market access	IV-7
U.S. industry positions on the URA	IV-7
Chapter 26. Textiles	IV-9
Summary of sector analysis and U.S. competitive position	IV-9
Key Uruguay Round provisions affecting sector	IV-10
Tariff provisions	IV-10
Other provisions	IV-11
Likely impact on U.S. trade	IV-11
Likely impact on U.S. production, employment, and consumers	IV-12
U.S. industry positions on the URA	IV-12

TABLE OF CONTENTS-Continued

	<i>Page</i>
Part IV. Likely impact of the URA on U.S. textile, apparel, and footwear sector—Continued	
Chapter 27. Apparel	IV-13
Summary of sector analysis and U.S. competitive position	IV-13
Key Uruguay Round provisions affecting sector	IV-14
Tariff provisions	IV-14
Other provisions	IV-15
Likely impact on U.S. trade	IV-15
Likely impact on U.S. production, employment, and consumers	IV-16
U.S. industry positions on the URA	IV-17
Chapter 28. Footwear	IV-19
Summary of sector analysis and U.S. competitive position	IV-19
Key Uruguay Round provisions affecting sector	IV-20
Tariff provisions	IV-20
Other provisions	IV-20
Likely impact on U.S. trade	IV-20
Likely impact on U.S. production, employment, and consumers	IV-21
U.S. industry positions on the URA	IV-21
 Part V. Likely impact of the URA on U.S. minerals and metals sectors	 V-1
Summary of the likely impact of the URA on U.S. minerals and metals sectors	V-3
Chapter 29. Nonferrous minerals, metals, and related products	V-5
Summary of sector analysis and U.S. competitive position	V-5
Key Uruguay Round provisions affecting sector	V-6
Tariff provisions	V-6
Other provisions	V-7
Likely impact on U.S. trade	V-7
Likely impact on U.S. production, employment, and consumers	V-8
U.S. industry positions on the URA	V-8
Chapter 30. Flat glass, fiberglass, and miscellaneous glass products	V-11
Summary of sector analysis and U.S. competitive position	V-11
Key Uruguay Round provisions affecting sector	V-12
Tariff provisions	V-12
Other provisions	V-12
Likely impact on U.S. trade	V-12
Likely impact on U.S. production, employment, and consumers	V-12
U.S. industry positions on the URA	V-13
Chapter 31. Industrial and household ceramics	V-15
Summary of sector analysis and U.S. competitive position	V-15
Key Uruguay Round provisions affecting sector	V-16
Tariff provisions	V-16
Other provisions	V-16
Likely impact on U.S. trade	V-16
Likely impact on U.S. production, employment, and consumers	V-16
U.S. industry positions on the URA	V-16

TABLE OF CONTENTS-Continued

	<i>Page</i>
Part V. Likely impact of the URA on U.S. minerals and metals sectors—Continued	
Chapter 32. Non-metallic industrial minerals	..... V-19
Summary of sector analysis and U.S. competitive position	..... V-19
Key Uruguay Round provisions affecting sector	..... V-20
Tariff provisions	..... V-20
Other provisions	..... V-20
Likely impact on U.S. trade	..... V-20
Likely impact on U.S. production, employment, and consumers	..... V-21
U.S. industry positions on the URA	..... V-21
Chapter 33. Steelmaking raw materials	..... V-23
Summary of sector analysis and U.S. competitive position	..... V-23
Key Uruguay Round provisions affecting sector	..... V-24
Tariff provisions	..... V-24
Other provisions	..... V-24
Likely impact on U.S. trade	..... V-24
Likely impact on U.S. production, employment, and consumers	..... V-24
U.S. industry positions on the URA	..... V-24
Chapter 34. Basic iron and steel products	..... V-25
Summary of sector analysis and U.S. competitive position	..... V-25
Key Uruguay Round provisions affecting sector	..... V-26
Tariff provisions	..... V-26
Other provisions	..... V-26
Likely impact on U.S. trade	..... V-27
Likely impact on U.S. production, employment, and consumers	..... V-27
U.S. industry positions on the URA	..... V-28
Chapter 35. Fabricated metal products	..... V-29
Summary of sector analysis and U.S. competitive position	..... V-29
Key Uruguay Round provisions affecting sector	..... V-30
Tariff provisions	..... V-30
Other provisions	..... V-30
Likely impact on U.S. trade	..... V-30
Likely impact on U.S. production, employment, and consumers	..... V-30
U.S. industry positions on the URA	..... V-31
Part VI. Likely impact of the URA on U.S. machinery and transportation sectors	v1-1
Summary of the likely impact of the URA on U.S. machinery and transportation sectors	..... VI-3
Chapter 36. Motor vehicles	..... VI-5
Summary of sector analysis and U.S. competitive position	..... VI-5
Key Uruguay Round provisions affecting sector	..... VI-6
Tariff provisions	..... VI-6
Other provisions	..... VI-6
Likely impact on U.S. trade	..... VI-7
Likely impact on U.S. production, employment, and consumers	..... VI-7
U.S. industry positions on the URA	..... VI-7

TABLE OF CONTENTS-Continued

	<i>Page</i>
Part VI. Likely impact of the URA on U.S. machinery and transportation sectors—Continued	
Chapter 37. Motor-vehicle parts	VI-9
Summary of sector analysis and U.S. competitive position	VI-9
Key Uruguay Round provisions affecting sector	VI-10
Tariff provisions	VI-10
Other provisions	VI-10
Likely impact on U.S. trade	VI-11
Likely impact on U.S. production, employment, and consumers	VI-11
U.S. industry positions on the URA	VI-11
Chapter 38. Aerospace equipment and parts	VI-13
Summary of sector analysis and U.S. competitive position	VI-13
Key Uruguay Round provisions affecting sector	VI-14
Tariff provisions	VI-14
Other provisions	VI-14
Likely impact on U.S. trade	VI-14
Likely impact on U.S. production, employment, and consumers	VI-14
U.S. industry positions on the URA	VI-15
Chapter 39. Certain transportation equipment	VI-17
Summary of sector analysis and U.S. competitive position	VI-17
Key Uruguay Round provisions affecting sector	VI-18
Tariff provisions	VI-18
Other provisions	VI-18
Likely impact on U.S. trade	VI-18
Likely impact on U.S. production, employment, and consumers	VI-18
U.S. industry positions on the URA	VI-19
Chapter 40. Metal and wood working equipment	VI-21
Summary of sector analysis and U.S. competitive position	VI-21
Key Uruguay Round provisions affecting sector	VI-22
Tariff provisions	VI-22
Other provisions	VI-22
Likely impact on U.S. trade	VI-22
Likely impact on U.S. production, employment, and consumers	VI-22
U.S. industry positions on the URA	VI-23
Chapter 41. Industrial machinery	VI-25
Summary of sector analysis and U.S. competitive position	VI-25
Key Uruguay Round provisions affecting sector	VI-26
Tariff provisions	VI-26
Other provisions	VI-26
Likely impact on U.S. trade	VI-26
Likely impact on U.S. production, employment, and consumers	VI-27
U.S. industry positions on the URA	VI-27
Chapter 42. Electrical equipment and components	VI-29
Summary of sector analysis and U.S. competitive position	VI-29
Key Uruguay Round provisions affecting sector	VI-30
Tariff provisions	VI-30
Other provisions	VI-30
Likely impact on U.S. trade	VI-31
Likely impact on U.S. production, employment, and consumers	VI-31
U.S. industry positions on the URA	VI-31

TABLE OF CONTENTS-Continued

	<i>Page</i>
Part VI. Likely impact of the URA on U.S. machinery and transportation sectors—Continued	
Chapter 43. Appliances	VI-33
Summary of sector analysis and U.S. competitive position	VI-33
Key Uruguay Round provisions affecting sector	VI-34
Tariff provisions	VI-34
Other provisions	VI-34
Likely impact on U.S. trade	VI-34
Likely impact on U.S. production, employment, and consumers	VI-34
U.S. industry positions on the URA	VI-34
Chapter 44. Miscellaneous equipment	VI-35
Summary of sector analysis and U.S. competitive position	VI-35
Key Uruguay Round provisions affecting sector	VI-36
Tariff provisions	VI-36
Other provisions	VI-36
Likely impact on U.S. trade	VI-36
Likely impact on U.S. production, employment, and consumers	VI-37
U.S. industry positions on the URA	VI-37
 Part VII. Likely impact of the URA on U.S. electronics sectors	
VII-1	
Summary on the likely impact of the URA on U.S. electronics sectors	VII-3
Chapter 45. Computers and office equipment	VII-5
Summary of sector analysis and U.S. competitive position	VII-5
Key Uruguay Round provisions affecting sector	VII-6
Tariff provisions	VII-6
Other provisions	VII-7
Likely impact on U.S. trade	VII-7
Likely impact on U.S. production, employment, and consumers	VII-7
U.S. industry positions on the URA	VII-8
Chapter 46. Telephone and telegraph apparatus and optical cable	VII-9
Summary of sector analysis and U.S. competitive position	VII-9
Key Uruguay Round provisions affecting sector	VII-10
Tariff provisions	VII-10
Other provisions	VII-10
Likely impact on U.S. trade	VII-10
Likely impact on U.S. production, employment, and consumers	VII-11
U.S. industry positions on the URA	VII-11
Chapter 47. Consumer electronics	VII-13
Summary of sector analysis and U.S. competitive position	VII-13
Key Uruguay Round provisions affecting sector	VII-14
Tariff provisions	VII-14
Other provisions	VII-14
Likely impact on U.S. trade	VII-14
Likely impact on U.S. production, employment, and consumers	VII-14
U.S. industry positions on the URA	VII-14

TABLE OF CONTENTS-Continued

	<i>Page</i>
Part VII. Likely impact of the URA on U.S. electronics sectors—Continued	
Chapter 48. Recorded media	VII- 17
Summary of sector analysis and U.S. competitive position	VII-17
Key Uruguay Round provisions affecting sector	VII-18
Tariff provisions	VII-18
Other provisions	VII-18
Likely impact on U.S. trade	VII-18
Likely impact on U.S. production, employment, and consumers	VII-19
U.S. industry positions on the URA	VII- 19
Chapter 49. Semiconductors and other electronic components	VII-21
Summary of sector analysis and U.S. competitive position	VII-21
Key Uruguay Round provisions affecting sector	VII-22
Tariff provisions	VII-22
Other provisions	VII-22
Likely impact on U.S. trade	VII-23
Likely impact on U.S. production, employment, and consumers	VII-23
U.S. industry positions on the URA	VII-23
Chapter 50. Instruments	VII-25
Summary of sector analysis and U.S. competitive position	VII-25
Key Uruguay Round provisions affecting sector	VII-26
Tariff provisions	VII-26
Other provisions	VII-26
Likely impact on U.S. trade	VII-26
Likely impact on U.S. production, employment, and consumers	VII-27
U.S. industry positions on the URA	VII-27
Chapter 51. Medical equipment	VII-29
Summary of sector analysis and U.S. competitive position	VII-29
Key Uruguay Round provisions affecting sector	VII-30
Tariff provisions	VII-30
Other provisions	VII-30
Likely impact on U.S. trade	VII-30
Likely impact on U.S. production, employment, and consumers	VII-31
U.S. industry positions on the URA	VII-31
Chapter 52. Photographic and optical equipment and materials	VII-33
Summary of sector analysis and U.S. competitive position	VII-33
Key Uruguay Round provisions affecting sector	VII-34
Tariff provisions	VII-34
Other provisions	VII-34
Likely impact on U.S. trade	VII-35
Likely impact on U.S. production, employment, and consumers	VII-35
U.S. industry positions on the URA	VII-35
 Part VIII. Likely impact of the URA on U.S. miscellaneous manufactures sectors	
Summary of the likely impact of the URA on U.S. miscellaneous manufactures sectors	VIII-1
Summary of the likely impact of the URA on U.S. miscellaneous manufactures sectors	VIII-3

TABLE OF CONTENTS-Continued

	<i>Page</i>
Part VIII. Likely impact of the URA on U.S. miscellaneous manufactures sectors—Continued	
Chapter 53. Silverware, flatware, and jewelry	VIII-5
Summary of sector analysis and U.S. competitive position	VIII-5
Key Uruguay Round provisions affecting sector	VIII-6
Tariff provisions	VIII-6
Other provisions	VIII-6
Likely impact on U.S. trade	VIII-6
Likely impact on U.S. production, employment, and consumers	VIII-7
U.S. industry positions on the URA	VIII-7
Chapter 54. Recreational goods	VIII-9
Summary of sector analysis and U.S. competitive position	VIII-9
Key Uruguay Round provisions affecting sector	VIII-10
Tariff provisions	VIII-10
Other provisions	VIII-10
Likely impact on U.S. trade	VIII-10
Likely impact on U.S. production, employment, and consumers	VIII-10
U.S. industry positions on the URA	VIII-11
Chapter 55. Luggage, handbags, and flat goods	VIII-13
Summary of sector analysis and U.S. competitive position	VIII-13
Key Uruguay Round provisions affecting sector	VIII-14
Tariff provisions	VIII-14
Other provisions	VIII-14
Likely impact on U.S. trade	VIII-14
Likely impact on U.S. production, employment, and consumers	VIII-15
U.S. industry positions on the URA	VIII-15
Chapter 56. Furniture and lamps	VIII-17
Summary of sector analysis and U.S. competitive position	VIII-17
Key Uruguay Round provisions affecting sector	VIII-18
Tariff provisions	VIII-18
Other provisions	VIII-18
Likely impact on U.S. trade	VIII-18
Likely impact on U.S. production, employment, and consumers	VIII-19
U.S. industry positions on the URA	VIII-19
Chapter 57. Miscellaneous manufactured articles	VIII-21
Summary of sector analysis and U.S. competitive position	VIII-21
Key Uruguay Round provisions affecting sector	VIII-22
Tariff provisions	VIII-22
Other provisions	VIII-22
Likely impact on U.S. trade	VIII-22
Likely impact on U.S. production, employment, and consumers	VIII-23
U.S. industry positions on the URA	VIII-23
 Part IX. Likely impact of the URA on U.S. service sectors a-1	
Summary of the likely impact of the URA on U.S. service sectors	IX-3
Chapter 58. General agreement on trade in services	IX-5

TABLE OF CONTENTS-Continued

	<i>Page</i>
Part IX. Likely impact of the URA on U.S. service sectors—Continued	
Chapter 59. Audiovisual services	IX-7
Summary of sector analysis and U.S. competitive position	IX-7
Key Uruguay Round provisions affecting sector	IX-8
Likely impact on U.S. trade	IX-8
Likely impact on U.S. revenues, employment, and consumers	IX-8
U.S. industry positions on the URA	IX-8
Chapter 60. Business and professional services	DC-11
Summary of sector analysis and U.S. competitive position	IX-11
Key Uruguay Round provisions affecting sector	IX-12
Likely impact on U.S. trade	IX-12
Likely impact on U.S. revenues, employment, and consumers	IX-13
U.S. industry positions on the URA	IX-13
Chapter 61. Architectural, engineering, and construction (AEC) services	IX-15
Summary of sector analysis and U.S. competitive position	IX-15
Key Uruguay Round provisions affecting sector	IX-16
Likely impact on U.S. trade	IX-17
Likely impact on U.S. revenues, employment, and consumers	IX-17
U.S. industry positions on the URA	DC-18
Chapter 62. Tourism services	IX-19
Summary of sector analysis and U.S. competitive position	IX-19
Key Uruguay Round provisions affecting sector	IX-20
Likely impact on U.S. trade	IX-20
Likely impact on U.S. revenues, employment, and consumers	IX-20
U.S. industry positions on the URA	IX-20
Chapter 63. Value-added telecommunication services	IX-21
Summary of sector analysis and U.S. competitive position	IX-21
Key Uruguay Round provisions affecting sector	IX-22
Likely impact on U.S. trade	IX-22
Likely impact on U.S. revenues, employment, and consumers	IX-23
U.S. industry positions on the URA	IX-23

Appendices

A.	Request letter	A-1
B.	Federal Register notice	B-1
C.	List of industry sectors	C-1
D.	List of submissions	D-1
E.	Methodology for sector-level analysis	E-1
F.	Trade balance tables, by sector and industry	F-1

Figures

2-1.	Recent studies modeling estimated economy-wide effects of the URA	I-10
------	---	------

TABLE OF CONTENTS-Continued

		<i>Page</i>
Tables		
1-1.	Countries participating in Uruguay Round negotiations, as of March 28, 1993	1-4
1-2.	Key dates in the Uruguay Round	1-5
2-1.	National income effects of the Uruguay Round agreements: A review of studies, predicted global effects, predicted effect on the United States, and on other regions	I-12
2-2.	Assumptions of 1993 computable general equilibrium models: reductions in tariffs and nontariff barriers, by sector	1-13
4-1.	Livestock and meat: Selected U.S. sector data, 1991-93	11-9
5-1.	Poultry and eggs: Selected U.S. sector data, 1991-93	11-13
6-1.	Dairy: Selected U.S. sector data, 1991-93	11-17
6-2.	Reductions in EU export assistance under the URA	11-20
7-1.	Fish: Selected U.S. sector data, 1991-93	11-21
8-1.	Sugar, other sweeteners, and ethanol: Selected U.S. sector data, 1991-93	11-25
9-1.	Fruit and vegetable products: Selected U.S. sector data, 1991-93	11-29
10-1.	Grain, milled grain, and animal feed: Selected U.S. sector data, 1991-93	11-33
11-1.	Oilseed and oilseed products: Selected U.S. sector data, 1991-93	11-37
12-1.	Beverages: Selected U.S. sector data, 1991-93	11-41
13-1.	Tobacco and tobacco products: Selected U.S. sector data, 1991-93	11-45
14-1.	Tropical and specialty agricultural products: Selected U.S. sector data, 1991-93	11-49
15-1.	Wood and lumber products: Selected U.S. sector data, 1991-93	11-53
16-1.	Paper, pulp, and printed matter: Selected U.S. sector data, 1991-93	11-57
17-1.	Cotton: Selected U.S. sector data, 1991-93	11-61
18-1.	Energy and related products: Selected U.S. sector data, 1991-93	11-5
19-1.	Primary aromatic chemicals and olefins: Selected U.S. sector data, 1991-93	11-9
20-1.	Agricultural chemicals: Selected U.S. sector data, 1991-93	11-13
21-1.	Miscellaneous finished chemical products: Selected U.S. sector data, 1991-93	11-17
22-1.	Pharmaceuticals: Selected U.S. sector data, 1991-93	11-21
23-1.	Rubber, plastics, and products thereof: Selected U.S. sector data, 1991-93	11-25
24-1.	Miscellaneous chemicals: Selected U.S. sector data, 1991-93	11-29
25-1.	Agreement on textiles and clothing: stages starting dates, share of trade integrated, and increase in quota growth rates	IV-6
26-1.	Textiles: Selected U.S. sector data, 1991-93	IV-9
27-1.	Apparel: Selected U.S. sector data, 1991-93	IV-13
28-1.	Footwear: Selected U.S. sector data, 1991-93	IV-19
29-1.	Nonferrous minerals, metals, and related products: Selected U.S. sector data, 1991-93	V-5
29-2.	Certain nonferrous ores, refined metal, and semifabricates: World and U.S. production, and U.S. ranking, 1992	V-6
30-1.	Flat glass, fiberglass, and miscellaneous glass products: Selected U.S. sector data, 1991-93	V-11
31-1.	Industrial and household ceramics: Selected U.S. sector data, 1991-93	V-15
32-1.	Non-metallic industrial minerals: Selected U.S. sector data, 1991-93	V-19
33-1.	Steelmaking raw materials: Selected U.S. sector data, 1991-93	V-23
34-1.	Basic iron and steel products: Selected U.S. sector data, 1991-93	V-25
35-1.	Fabricated metal products: Selected U.S. sector data, 1991-93	V-29
36-1.	Motor vehicles: Selected U.S. sector data, 1991-93	VI-5
37-1.	Motor-vehicle parts: Selected U.S. sector data, 1991-93	VI-9
38-1.	Aerospace equipment and parts: Selected U.S. sector data, 1991-93	VI-13

TABLE OF CONTENTS-Continued

Tables	<i>Page</i>
39-1. Certain transportation equipment: Selected U.S. sector data, 1991-93	VI-17
40-1. Metal and wood working equipment: Selected U.S. sector data, 1991-93	VI-21
41-1. Industrial machinery: Selected U.S. sector data, 1991-93	VI-25
42-1. Electrical equipment and components: Selected U.S. sector data, 1991-93	VI-29
43-1. Appliances: Selected U.S. sector data, 1991-93	VI-33
44-1. Miscellaneous equipment: Selected U.S. sector data, 1991-93	VI-35
45-1. Computers and office equipment: Selected U.S. sector data, 1991-93	VII-5
46-1. Telephone and telegraph apparatus and optical cable: Selected U.S. sector data, 1991-93	VII-9
47-1. Consumer electronics: Selected U.S. sector data, 1991-93	VII-13
48-1. Recorded media: Selected U.S. sector data, 1991-93	VII-17
49-1. Semiconductors and other electronic components: Selected U.S. sector data, 1991-93	VII-21
50-1. Instruments: Selected U.S. sector data, 1991-93	VII-25
51-1. Medical equipment: Selected U.S. sector data, 1991-93	VII-29
52-1. Photographic and optical equipment and materials: Selected U.S. sector data, 1991-93	VII-33
53-1. Silverware, flatware, and jewelry: Selected U.S. sector data, 1991-93	VIII-9
54-1. Recreational goods: Selected U.S. sector data, 1991-93	VIII-13
55-1. Luggage, handbags, and flat goods: Selected U.S. sector data, 1991-93	VIII-17
56-1. Furniture and lamps: Selected U.S. sector data, 1991-93	VIII-21
57-1. Miscellaneous manufactured articles: Selected U.S. sector data, 1991-93	IX-7
59-1. Audiovisual services: Selected U.S. sector data, 1991-93	IX-11
60-1. Business and professional services: Selected U.S. sector data, 1991-93	IX-15
61-1. Architectural, engineering, and construction (AEC) services: Selected U.S. sector data, 1991-93	IX-19
62-1. Tourism services: Selected U.S. sector data, 1991-93	IX-21
63-1. Value-added telecommunication services: Selected U.S. sector data, 1991-93	IX-21

EXECUTIVE SUMMARY

The Uruguay Round Agreements (URA) are the result of a series of negotiations among 117 countries held under the auspices of the General Agreement on Tariffs and Trade (GATT). Negotiations began on September 20, 1986, at Punta del Este, Uruguay, and reached agreement in Geneva, Switzerland, on December 15, 1993. The Final Act was signed on April 15, 1994, at a conference in Marrakesh, Morocco.

The URA are part of a document entitled "Agreement Establishing the World Trade Organization (WTO)." The document includes four annexes that contain agreements relating to agriculture, sanitary and phytosanitary (SPS) measures, textiles and clothing, antidumping, trade-related investment measures (TRIMs), subsidies and countervailing measures, safeguards, technical barriers to trade, customs valuation, preshipment inspection, rules of origin, import licensing procedures, services, trade-related aspects of intellectual property rights (TRIPs), and dispute settlement. Agreements on agriculture, textiles and clothing, services, and TRIPs bring these areas under comprehensive, multilateral discipline for the first time.

The purpose of this report is twofold: (i) to review and analyze studies of the economy-wide effects of the URA; and (ii) to analyze the impact of both tariff and nontariff provisions of the URA on agricultural, industrial, and service sectors of the U.S. economy.

Likely Impact of the URA on the U.S. Economy

- Economic theory suggests that multilateral trade liberalization under the URA likely will lead to increased exports by more efficient U.S. industries, increased imports of goods for which the United States does not have a comparative advantage, increased U.S. disposable income, and improved U.S. economic growth. Increased exports likely will increase production and employment in exporting industries while raising consumer prices. Increased imports likely will lower consumer prices but reduce production and employment in industries that compete with imports.
- The Commission's assessment of the likely impact of the URA on the U.S. economy is based on a review of available economy-wide studies employing static computable general equilibrium (CGE) models and one dynamic linked-macroeconomic model. In general, studies using CGE models predict that U.S. gross domestic product (GDP) and national income will increase. In percentage terms, static estimates of gains in GDP are expected to be small, although the long-run dynamic growth effects of trade liberalization may be two to three times the static estimates. The URA likely will result in a minor increase in aggregate employment in the United States. U.S. exports and imports are expected to increase, but the rate of increase is not predicted by these studies. These estimates represent a lower bound estimate of the effect of the URA on the U.S. economy, since they do not reflect the impact of the reduction in nontariff barriers (NTBs), such as trade-related performance requirements, import licensing, or lack of intellectual property protection, that generally are not quantifiable.

Likely Impact of the URA on U.S. Agriculture, Industry, and Service Sectors

- For most sectors of the U.S. economy, the net trade effects of the URA in the long term are likely to be small or negligible (5 percent or less);¹ of the 48 sectors with estimated effects

¹ The Commission used the following terms to describe the expected impact of the Uruguay Round Agreements (URA) on U.S. trade, production, employment, and U.S. consumers in individual sectors of the U.S. economy in the long term, once all agreements are implemented:

negligible	..... a change of 1 percent or less;
small	..... a change of over 1 percent to 5 percent;
modest	..... a change of over 5 percent to 15 percent; and
sizeable	..... a change of over 15 percent.

of this magnitude, 35 are likely to experience beneficial effects, while the impact for the remainder is likely to be negative. Modest positive net trade effects (over 5 percent to 15 percent) are likely in two agricultural sectors (fruits and vegetables; and grain, milled grain, and animal feed); miscellaneous chemicals; electrical equipment and components; recorded media; and value-added telecommunications; modest negative net trade effects are likely for recreational goods. Three sectors are expected to experience sizeable net trade effects (over 15 percent): (1) pharmaceuticals (positive), (2) textiles (negative), and (3) apparel (negative). Certain industries may experience effects that differ from those anticipated for the sector as a whole.

- Agreements other than tariff reductions are likely to have a significant impact on a number of sectors. Agreements that improve TRIPs protection and that increase transparency and standardize procedures for sanitary and phytosanitary measures, government procurement, pre-shipment inspection, and TRIMs are expected to have a positive impact that will augment trade gains due to tariff reductions.
- In certain sectors, broad tariff reductions were proposed. "Zero-for-zero" tariff agreements, under which the United States, Japan, the European Union (EU), Canada, and others would reduce all tariffs to zero, were reached for most pharmaceuticals, beer and certain distilled spirits, furniture, toys, medical equipment, certain types of industrial equipment, and steel. Although the United States pursued zero-for-zero agreements for wood products, oilseeds, and certain nonferrous minerals, agreements were not achieved. Tariffs for many chemical products were reduced to 6.5 percent ad valorem or less under the Chemical Tariff Harmonization Agreement, which was adopted by many developed countries.
- In assessing the impact of the URA at the sector level, a static partial equilibrium framework was used in which products from the United States, other GATT countries, and non-GATT countries were treated as imperfect substitutes in markets in both the United States and other GATT countries. The trade, consumption, production, and employment effects of the URA were analyzed in two separate simulations: one simulation focused on changes in the U.S. market, while the other focused on changes in other GATT-country markets. These simulations provided quantitative estimates of changes in U.S. production, employment, U.S. imports and import prices, and U.S. exports.² This analysis was supplemented by qualitative analysis based on interviews with experts in trade, industry, and government; written submissions received by the Commission; and Commission staff expertise.
- Summaries of the likely impact of the URA on U.S. net trade, production, employment, and consumers are provided below, corresponding to each of the eight parts of the Commission's report that analyzed agriculture, industry, and service sectors.

U.S. Agriculture, Fishery, and Forestry Sectors

(Part II, Chapters 3-17)

- The net effect of the URA on agricultural sectors of the U.S. economy will be generally positive, increasing the overall level of trade, providing increased employment opportunities, and benefitting consumers. Because the URA will increase both export opportunities and the level of imports for most agricultural sectors, the overall net trade effects are likely to show negligible (1 percent or less) to modest (over 5 percent to 15 percent) gains at the sector level.
- Exports in the following sectors are likely to reflect a small amount of growth (over 1 percent to 5 percent): livestock and meat; poultry and eggs; tropical and specialty products; and pulp, paper, and printed matter. Sector exports likely to show modest gains include: fruits and vegetables, grains, and tobacco and tobacco products. Exports of dairy products and beverages are expected to increase by a sizeable amount (over 15 percent). There are likely to be accompanying negligible or small increases in employment (5 percent or less) in most sectors.
- Certain industries are likely to experience small or negligible negative production and employment effects, due to increased import competition as U.S. nontariff measures are liberalized. These industries include the domestic peanut and vegetable oil industries and producers of certain processed fruits and vegetables, such as frozen asparagus, broccoli and

² The Commission used 1993 trade data in assessing the relative likely impact of the URA after full implementation of the agreements.

cauliflower, canned mushrooms, and dehydrated onions and garlic. On a sector basis, trade and production of oilseed and wood products may decline negligibly due to the URA.

- The Agreement on Agriculture is the most important URA for these sectors.³ Under this agreement, access to the U.S. and foreign markets will be increased as export and production subsidies are reduced; U.S. section 22 quotas and the Meat Import Act will be replaced by tariffs that will then be reduced. Average domestic and foreign tariff reductions under the URA generally will be small for most sectors (5 percentage points or less), as many U.S. agricultural imports enter duty-free under preferential tariff provisions or are subject to quota limitations. Zero-for-zero tariff agreements were achieved in beer and certain distilled spirits, but not in wood products or oilseeds.
- Certain agricultural sectors will benefit under the Sanitary and Phytosanitary Agreement, in part because of provisions for mutual acceptance of national inspection systems and adoption of a "regionality" provision that permits exports from certified disease-free areas within a country. Agricultural sectors likely to be most affected include tobacco, fruits and vegetables, poultry, livestock and meat, beverages, and certain tropical and specialty products.
- Increased transparency and standardization of other import procedures should benefit many types of U.S. agricultural exports by reducing NTBs frequently encountered. Other important provisions of the URA, and the principal sectors affected, include customs valuation (tobacco products); dispute resolution (alcoholic beverages and fish); preshipment inspection (wood and lumber; paper, pulp, and printed matter); rules of origin (wood and lumber); and technical barriers to trade (wood and lumber). In addition, provisions of the TRIPs agreement likely will improve protection of U.S. seed patents and trademarks for brand names of cigarettes and certain alcoholic beverages.

U.S. Energy and Chemicals Sectors

(Part III, Chapters 18-24)

- The likely impact of the URA on the energy and chemicals sectors is expected to be positive. The net trade effect likely will be a negligible to small gain (5 percent or less) for most sectors; the miscellaneous chemicals and pharmaceutical sectors are expected to exhibit modest (over 5 percent to 15 percent) and sizeable (over 15 percent) increases, respectively. For all sectors, the URA are generally expected to result in negligible to small positive increases in production and employment. For U.S. consumers of sector products, there are likely to be negligible benefits (1 percent or less) associated with lower prices and increased product diversity. Gains to consumers of pharmaceuticals and miscellaneous chemicals are expected to be relatively larger, but will remain small.
- Tariffs on U.S. imports of energy and chemicals products are generally low. Under the Chemical Tariff Harmonization Agreement, tariffs in many developed countries will be harmonized at zero, 5.5, and 6.5 percent ad valorem for most chemical products. In addition, tariffs on most pharmaceutical trade will be eliminated as a result of a zero-for-zero tariff agreement.
- Although tariff reductions are the most significant URA provision for most energy and chemicals sectors, TRIPs provisions also will be beneficial for a number of industries, including pesticides and pharmaceuticals. In the pharmaceutical sector, for example, strengthened intellectual property rights are expected to result in increased U.S. exports and to provide pharmaceutical companies the opportunity to recoup a portion of their research and development expenditures.

U.S. Textile, Apparel, and Footwear Sectors

(Part IV, Chapters 25-28)

- The net trade effects of the URA are expected to be similar for both the textile and apparel sectors, although the magnitude will differ. The U.S. trade deficit for both textiles and apparel is likely to increase. A sizeable increase in apparel exports (over 15 percent) is expected to be

³ The Agreement on Agriculture is discussed in detail in ch. 3 of the report.

more than offset by increased imports; as a result, production and employment likely will fall by a modest amount (over 5 percent to 15 percent). For the textile sector, a small increase in exports (over 1 percent to 5 percent) will be offset by a modest increase in imports; a negligible decline (1 percent or less) in production and employment in the sector is expected. U.S. textile exports could increase to an even greater degree if certain potential markets with high tariff rates, such as India and Pakistan, offer additional tariff concessions. U.S. consumers of both textiles and apparel will benefit to a small degree, due to lower prices and increased variety of products.

- The net trade effects of tariff reductions under the URA are likely to be negative but negligible for the U.S. footwear sector, as tariff cuts by all countries were low. Moreover, the United States did not offer tariff reductions on products for which non-GATT countries, such as China, are major suppliers. Footwear production and employment are expected to decline by a negligible degree, but consumers are likely to benefit negligibly, due to lower prices and increased product diversity.
- The Agreement on Textiles and Clothing⁴ will have a greater impact on the U.S. textile and apparel sectors than any other provision under the URA. This agreement will require the United States and other countries with import quotas under the Multifiber Arrangement to phase out these limits in 3 stages over 10 years and to accelerate growth rates for quotas remaining in place during the phaseout period. The agreement requires countries to reduce trade barriers to textiles and apparel in their home markets and allows countries to take action against quota circumvention.
- The textile and apparel sectors also will benefit from the TRIPs agreement. Under the agreement, pirating of textile and garment designs, labels, and trademarks of U.S. firms should be reduced.

U.S. Minerals and Metals Sectors

(Part V, Chapters 29-35)

- The net trade effects of the URA on the minerals and metals sectors of the U.S. economy are likely to be negligible (1 percent or less) with improvement in sector trade balances, production, and employment for nonferrous minerals, metals, and related products; flat glass, fiberglass, and miscellaneous glass products; and steelmaking raw materials. Other minerals and metals sectors likely will experience negligible declines in their trade balances, production, and employment. U.S. consumers in all sectors likely will benefit to a negligible degree, due to lower prices and increased product diversity; consumers of industrial and household ceramics likely will benefit by a small amount (over 1 percent to 5 percent).
- Although the general effect of the URA on minerals and metals sectors likely will be negligible, the effect on certain individual industries and product groups is expected to be greater. A modest increase (over 5 percent to 15 percent) in imports of steel wire products is expected to occur, prompting negligible declines in domestic production and employment. The ceramic tile industry likely will experience a modest decline in its trade balance, and a small decrease in production and employment. The reduction of high U.S. tariffs on unwrought zinc alloys likely will result in increased imports, resulting in declines in production and employment.
- For the most part, tariffs on minerals and metals products entering the United States are low and U.S. and foreign tariff reductions under the URA were minor. In addition, many sector products enter the United States subject to zero or reduced duties under various trade agreements, including the North American Free-Trade Agreement (NAFTA), and the Generalized System of Preferences (GSP). Tariffs on most steel products will be eliminated under zero-for-zero agreements.
- Although tariff reductions are the most significant URA provision affecting U.S. minerals and metals sectors, certain sectors may be affected by agreements on safeguards (steel products) and antidumping and subsidies and countervailing measures (certain nonferrous minerals and metals, basic iron and steel, and fabricated metal products). The impact of these agreements depends on how implementing legislation affects the administration of their provisions and the likelihood of imposition of additional import duties. Agreements related to standards and

⁴ The Agreement on Textiles and Clothing is discussed in detail in ch. 25 of the report.

government procurement are expected to benefit non-metallic industrial minerals and steel products, respectively, by opening foreign markets to U.S. exports.

U.S. Machinery and Transportation Sectors

(Part VI, Chapters 36-44)

- U.S. machinery and transportation sectors are expected to benefit overall from the URA. The trade balance in most sectors is expected to reflect a negligible to small improvement (5 percent or less), with increases in exports generally larger than increases in imports; a modest improvement (over 5 percent to 15 percent) is expected for electrical equipment and components. As a result of increased trade, corresponding increases in U.S. production and employment are expected. U.S. consumers of many sector products are likely to experience negligible to small gains under the URA due to lower prices.
- Average tariff rates in certain sectors are low because many products are subject to preferential trade agreements, such as the Civil Aircraft Agreement, the Automotive Products Trade Act, and various bilateral agreements. Tariff reductions on a sector basis are generally minor under the URA. However, U.S. and many foreign tariffs on certain machinery and equipment will be eliminated. Products subject to zero-for-zero tariff agreements include certain wrapping, packaging, and can-sealing machinery; forklift trucks; certain farm and garden equipment; certain pulp, paper, and paperboard machinery; and certain construction, mining, and mineral processing equipment.
- While most gains likely will be due to tariff reductions, other URA provisions may also benefit certain machinery and transportation sectors. The agreement on subsidies and countervailing duties, for example, allows nonactionable government subsidies for research and development below certain levels; this may be advantageous for certain segments of the aerospace and transportation sectors. Agreements that improve procedures for pre-shipment inspection and government procurement are likely to contribute to increased U.S. exports of industrial machinery and electrical equipment and components.

U.S. Electronics Sectors

(Part VII, Chapters 45-52)

- U.S. electronics sectors are likely to benefit from the URA as net trade is expected to increase by negligible to modest amounts (15 percent or less). Production and employment are expected to increase by negligible to small amounts (5 percent or less), with employment in the recorded media sector increasing modestly (over 5 percent to 15 percent). U.S. consumers of most sector products are expected to gain by a negligible or small degree, due primarily to lower prices and increased product availability.
- Imports of telephone and telegraph apparatus and of consumer electronic products are expected to exceed exports, leading to modest and negligible (1 percent or less) declines in their respective trade balances. Employment and production in the telephone and telegraph apparatus and consumer electronics sectors are likely to decline negligibly.
- Tariff reductions under the URA will lower the level of tariffs faced by sector products, which now vary from zero to 6.5 percent ad valorem. In addition, tariffs on medical equipment are scheduled to be eliminated under a zero-for-zero agreement.
- In addition to tariff provisions of the URA, the TRIPs agreement is also expected to significantly affect U.S. electronic sectors. Increased protection of copyrights and emerging technologies likely will increase revenues and help maintain the high levels of research and development enjoyed by many of these sectors. Trade also likely will benefit from increased transparency and standardization of procedures associated with agreements on rules of origin (particularly important for components of computers and office equipment, telephone and telegraph apparatus, semiconductors, instruments, and photographic and optical equipment); customs valuation (instruments and photographic equipment); and technical barriers to trade (instruments and medical equipment).

U.S. Miscellaneous Manufactures Sectors

(Part VIII, Chapters 53-57)

- The net trade effects of the URA for most miscellaneous manufactures sectors generally is likely to be small (over 1 percent to 5 percent) and negative; the trade balance for recreational goods is expected to decline modestly (over 5 percent to 15 percent). As a result, U.S. production and employment in these sectors are expected to decline by a negligible degree (1 percent or less). The sector comprised of miscellaneous manufactured articles is expected to show a negligible improvement in net trade, production, and employment. Consumers of all sector products likely will benefit as prices fall and a somewhat greater variety of goods is available in the U.S. market. Consumers of recreational goods and luggage, handbags, and flat goods, are likely to experience small gains; those of silverware, flatware, and jewelry; furniture and lamps; and miscellaneous manufactured articles are expected to receive a negligible benefit.
- Tariffs in the miscellaneous manufactures sectors vary widely, ranging from zero to 21 percent ad valorem. However, many sector products enter the United States subject to zero or reduced duties under various trade agreements, including NAFTA, the Caribbean Basin Economic Recovery Act, and GSP.
- Tariff reduction offers on most sector products under the URA ranged from 10 to 73 percent. Tariffs on toys and furniture are to be eliminated under zero-for-zero agreements. Because U.S. tariff reductions will be extended on a most-favored-nation basis, non-GATT countries, such as China and Taiwan—major suppliers of sector imports, also will benefit from these reductions.
- Tariff cuts are generally the most important URA provision affecting these sectors, although other provisions may significantly affect certain sectors. More comprehensive protection of copyrights and trademarks under the TRIPs agreement is particularly important for trademarks, copyrights, and designs of recreational products, such as toys, games, and sporting goods; stronger rules under the TRIPs agreement are expected to increase export opportunities for U.S. products in markets where such protection has been lax. If China and Taiwan become members of GATT, the elimination of the Multifiber Arrangement may lead to a significant increase in imports of certain luggage, handbags, and flat goods, increasing the negative effects for this sector.

U.S. Service Sectors

(Part IX, Chapters 58-63)

- For most service sectors, the URA are expected to have a small positive effect (over 1 percent to 5 percent) on trade, increasing the trade surplus in these sectors. Value-added telecommunications and audiovisual services are likely to experience a modest (over 5 percent to 15 percent) and negligible (1 percent or less) increase, respectively. Revenues earned by service providers are expected to increase by small to modest levels (over 1 percent to 15 percent), while employment is expected to increase by a negligible to small amount (5 percent or less). U.S. consumers are expected to benefit from the URA by a negligible to small degree, largely due to lower prices.
- The most significant URA provision affecting U.S. service sectors is the General Agreement on Trade in Services (GATS).⁵ Under the GATS, trade in services will be covered by multilateral disciplines for the first time. In addition, certain service sectors will be affected beneficially by agreements on TRIPs (audiovisual services) and government procurement (architectural, engineering, and construction services).

⁵ The General Agreement on Trade in Services is discussed in detail in ch. 58 of the report.

PART 1
INTRODUCTION

CHAPTER 1

Introduction

Purpose and Scope of Study

On December 15, 1993, the President notified the Congress of his intention to enter into trade agreements resulting from the Uruguay Round of multilateral trade negotiations under the General Agreement on Tariffs and Trade (GATT). At a signing meeting in Marrakesh, Morocco on April 15, 1994, participating countries agreed to submit the agreements to their legislatures or other competent authorities for approval, with the intent that the agreements will become effective January 1, 1995.

On March 23, 1994, the House Committee on Ways and Means and the Senate Committee on Finance requested that the Commission conduct a study to analyze the potential impact of the Uruguay Round Agreements (URA) on the U.S. economy overall and on major economic sectors. Specifically, the Committees asked that the Commission provide: (i) a review and analysis of economy-wide studies of the effects of the URA, focusing on the effects on overall U.S. employment, output, and trade flows; and (ii) analyses of the impact of both tariff and nontariff provisions of the URA on agricultural, industrial, and service sectors of the U.S. economy (see appendix C for a list of sectors).

This report is based on information drawn from both primary and secondary sources. The Commission received submissions from organizations representing industry and labor, consulting firms, and trade associations (see appendix D for a list of submissions). In addition, extensive telephone interviews were conducted with appropriate U.S. industry officials to obtain their views on the likely impact of the URA on U.S. agricultural, industrial, and service sectors.

Overview of the Agreements'

The URA are an outgrowth of a series of negotiations over 7 years among 125 countries,¹ held under the auspices of GATT (see table 1-1 for a list of countries participating in Uruguay Round negotiations). The Round was launched on September

20, 1986, at Punta del Este, Uruguay, and concluded in Geneva on December 15, 1993. Key dates from the negotiations are listed in table 1-2.

The Uruguay Round Agreements (URA) are part of a document entitled "Agreement Establishing the World Trade Organization (WTO)." This document provides for the establishment of the WTO and defines its structure and functions. The document includes four annexes that contain the remaining Uruguay Round agreements. Annex 1 contains: (i) 14 agreements relating to trade in goods, including the General Agreement on Tariffs and Trade 1994 (the GATT 1994),³ and agreements relating to agriculture, sanitary and phytosanitary measures, textiles and clothing, antidumping, trade-related investment measures (TRIMs), subsidies and countervailing measures, safeguards, technical barriers to trade, customs valuation, preshipment inspection, rules of origin, and import licensing procedures; (ii) the agreement relating to trade in services; and (iii) the agreement relating to trade-related aspects of intellectual property rights (TRIPs). The agreements in Annex 1 apply to all GATT members. Annex 2 sets out the Understanding on Rules and Procedures Governing the Settlement of Disputes, which applies to all GATT 1994 agreements. Annex 3 sets out the Trade Policy Review Mechanism.⁴ Finally, Annex 4 includes four plurilateral agreements relating to trade in civil aircraft, government procurement, and international arrangements for dairy products and for bovine meat; these four agreements apply only to those GATT members that have agreed to be bound by these agreements. The current GATT agreement, referred to as GATT 1947, covers only trade in goods and does not provide for an organization to oversee implementation of the agreement.

All texts of the Uruguay Round Final Agreements take effect January 1, 1995. Certain components of some agreements take effect after that date, not to exceed 11 years. Agreements on antidumping, technical barriers to trade, import licensing, customs valuation, dispute settlement, and the WTO take effect January 1, 1995. The provisions of the agricultural agreement are in complete effect within 6 years.

¹ Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations.

² The Final Act was signed by a total of 111 countries. Seven countries, including the United States, have not yet signed the Marrakesh Agreement because prior national legislative approval is required.

³ The General Agreement on Tariffs and Trade 1994 (GATT 1994) incorporates the GATT 1947.

⁴ The Trade Policy Review Mechanism is an administrative body that is to review GATT member trade policies and practices to ascertain their effect on the multilateral trading system.

Table 1-1
Countries Participating in Uruguay Round Negotiations, as of March 28, 1993

Algeria	Denmark	Lesotho	Saint Lucia
Antigua and Barbuda	Dominica	Luxembourg	Saint Vincent & the Grenadines
Argentina	Dominican Republic	Macau	Senegal
Australia	Egypt	Madagascar	Sierra Leone
Austria	El Salvador	Malawi	Singapore
Bahrain	Fiji	Malaysia	Slovak Republic
Bangladesh	Finland	Maldives	South Africa
Barbados	France	Mali	Spain
Belgium	Gabon	Malta	Sri Lanka
Belize	Gambia	Mauritania	Suriname
Benin	Germany	Mauritius	Swaziland
Bolivia	Ghana	Mexico	Sweden
Botswana	Greece	Morocco	Switzerland
Brazil	Grenada	Mozambique	Tanzania
Brunei Darussalam	Guatemala	Myanmar	Thailand
Burkina Faso	Guinea Bissau	Namibia	Togo
Burundi	Guyana	Netherlands	Trinidad and Tobago
Cameroon	Haiti	New Zealand	Tunisia
Canada	Honduras	Nicaragua	Turkey
Central African Republic	Hong Kong	Niger	Uganda
Chad	Hungary	Nigeria	United Arab Emirates
Chile	Iceland	Norway	United Kingdom
China	India	Pakistan	United States of America
Colombia	Indonesia	Paraguay	Uruguay
Congo	Ireland	Peru	Venezuela
Costa Rica	Israel	Philippines	Zaire
Cote d'Ivoire	Italy	Poland	Zambia
Cuba	Jamaica	Portugal	Zimbabwe
Cyprus	Japan	Romania	
Czech Republic	Kenya	Rwanda	
	Korea, Republic of	Saint Kitts and Nevis	
	Kuwait		

Note.—Not all countries participating in URA negotiations signed the final agreement. URA obligations and privileges are to accrue only to signatories.

Source: Compiled by USITC staff.

Non-agricultural tariff reductions may take effect immediately, or through 5- or 10-year staged reductions.

Methodologies

This section presents a brief description of the Commission's review of studies assessing the economy-wide impact of the URA (Chapter 2) and the methodologies that were used in the Commission's sector-specific assessments (Parts II through IX). A more detailed explanation of the sector-specific methodology is contained in appendix E.

Economy-wide assessment

The Commission reviewed recent economy-wide studies developed in 1992 and 1993 to provide

⁵ The U.S. tariff reduction for one item in the Harmonized Tariff Schedule is staged over 15 years. Some tariff reductions by foreign countries may also differ from the timeframes generally agreed upon.

information on the likely impact of the URA on the U.S. economy as a whole. In this review, the results of five recent static computable general equilibrium (CGE) models and one dynamic linked-macroeconomic model were examined. The distinctions between various types of models, and conclusions of the five studies are discussed in light of the differing assumptions and methodologies employed in estimating the likely impact of the URA on the U.S. economy.

Sector-level assessments

The Commission's sector-level analysis focuses on the likely long-term impact of the URA on U.S. consumption, production, employment, and trade in 58 sectors. Assessment of long-term impact, for the purpose of these analyses, is based on the estimated effects for each sector after pertinent URA provisions are fully in effect. In conducting this analysis, the

**Table 1-2
Key dates in the Uruguay Round**

Key date	Event
September 20, 1986	Eighth Round of multilateral trade negotiations under GATT auspices launched at Punta del Este, Uruguay.
January 28, 1987	Negotiating structure adopted with Trade Negotiations Committee (TNC) overseeing the Group on Negotiations on Goods (GNG) and the separate Group on Negotiations on Services (GNS). TNC oversees negotiating groups that begin work.
December 5-9, 1988	Mid-term Review at Ministerial Conference in Montreal, Canada. Impasses over agriculture, textiles, safeguards, and intellectual property postpone scheduled conclusion of Mid-term Review.
April 8, 1989	Montreal package of results adopted in Geneva.
December 3-7, 1990	Ministerial Conference in Brussels fails to conclude the Round. Impasse reached between the United States and the European Community (EC, now the European Union), primarily over the scope of agriculture reform.
February 26, 1991	Work program for resumption of negotiations adopted.
December 20, 1991	TNC Chairman Arthur Dunkel tables a Draft Final Act of the Uruguay Round ("Dunkel Draft"), inserting compromise antidumping and subsidies drafts because of lack of agreement.
November 20, 1992	United States and EC conclude agriculture accord on both multilateral and bilateral issues at Blair House in Washington, DC.
February 28, 1993	The U.S. fast-track negotiating authority expires. Fast-track renewed by U.S. Congress in June 1993 with deadline of December 15, 1993.
July 1, 1993	Peter Sutherland assumes the position of Director-General of GATT, and subsequently, TNC Chairman.
July 7, 1993	At G-7 Summit in Tokyo, Japan, the Quad (United States, EC, Japan, Canada) Trade Ministers agree on substantial but incomplete market access package.
July 14, 1993	Sutherland relaunches Uruguay Round negotiations in Geneva.
August 31, 1993	TNC adopts intensive work program aimed at concluding the Round by December 15, 1993.
December 15, 1993	Uruguay Round concluded with presentation of the Final Act.
April 15, 1994	Final Act signed at a conference in Marrakesh, Morocco.

Source: General Agreement on Tariffs and Trade, *GATT Focus* (Newsletter), No. 104, Dec. 1993, p.4; and "Global Trade Treaty Approved," *The Los Angeles Times - Washington Post News Service, NewsEDGE*, Apr. 16, 1994.

Commission examined all of the URA and identified those that likely would have an economic impact on each sector. For industrial and agricultural sectors where reliable quantitative data were available,⁶ the Commission used a partial equilibrium model to estimate quantitative effects of the URA on U.S. consumers and producers, and on U.S. trade and employment.⁷ Results of the Commission's model

⁶ Analysis of service sectors and certain agricultural sectors did not employ the Commission's partial equilibrium model.

⁷ Partial-equilibrium models are static models that are able to capture the likely direct effects of policy changes on narrow product categories. They do not capture linkages between various sectors of the economy or dynamic gains over time. See app. E for a more detailed explanation of partial equilibrium models.

were modified, where appropriate, based on qualitative analysis of sector trends and non-quantifiable factors. Both quantitative and qualitative analysis was based on extensive interviews with experts in trade, industry, and government; written submissions received by the Commission; and Commission staff expertise.

In assessing the impact of the URA at the sector level, the Commission's partial equilibrium framework treats products from the United States, other GATT countries, and non-GATT countries as imperfect substitutes in both the United States' and other GATT-country markets.⁸ Longterm effects on U.S.

⁸ The assumption of imperfect substitutes implies that countries both import and export a variety of products, even functionally identical products, due to such factors as differences in transportation costs or seasonal differences

consumers and trade, production, and employment are analyzed in two separate simulations:⁹ one simulation focuses on changes in the U.S. market, while the other focuses on changes in other GATT-country markets.¹⁰ For both sets of exercises, the market adjustments observed are those that would occur after the complete phase-in of the URA.

In the first simulation, U.S. tariffs and the tariff equivalents for quantifiable U.S. nontariff barriers (NTBs)¹¹ facing U.S. imports were reduced while holding all other factors constant, including tariffs and NTBs in other GATT countries. In this step, the simulation provided quantitative, upper bound estimates of the change in U.S. production, employment, and import prices, as well as the increase in U.S. imports from the rest of the world. This assessment was complicated by the fact that reductions in U.S. tariffs and certain NTBs will be made on a most-favored-nation (MFN) basis, i.e. for all countries that currently receive MFN status, regardless of whether they are GATT parties. As a result, non-GATT parties that receive MFN treatment from the United States, such as China and Taiwan, will accrue the benefits of reductions in U.S. tariffs and

⁸—Continued

in the timing of production. The assumption of imperfect substitutes and constant-elasticity demand and supply curves precludes complete specialization in one product by any GATT country after liberalization. Models allowing complete specialization would have provided larger maximum expected effects (upper bound estimates); however, complete specialization is rarely observed for most industries. The imperfect-substitutes assumption is common in applied research in international trade. For further discussion of this assumption and its implications, see P.S. Armington, "A Theory of Demand for Products Distinguished by Place of Production," *IMF Staff Papers*, Mar. 1969; and U.S. International Trade Commission (USITC), *The Economic Effects of Significant U.S. Import Restraints, Phase I: Manufacturing* (investigation No. 332-262), USITC publication 2222, Oct. 1989.

⁹ A similar two-step approach was used by the Commission in analyzing the effects of the North American Free Trade Agreement (NAFTA). For discussion of methodological issues, see USITC, *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

¹⁰ Due to time constraints, analysis of the likely net effects on U.S. trade, production, and employment were calculated from two separate simulations that do not capture the linkages between import and export sectors. See app. E for a discussion of the differences in results expected between an integrated model and the method used.

¹¹ Significant nontariff barriers (NTBs) in the U.S. market occur mainly in the agricultural, textile, and apparel sectors. Reductions in U.S. agricultural NTBs apply to imports from both GMT and non-GATT countries and were generally assessed qualitatively in this study. Reductions in U.S. NTBs under the Multifiber Arrangement apply only to GATT signatories and, consequently, the removal of NTBs in the textiles and apparel sectors were applied only to GATT countries. Such NTBs were quantified based on published estimates and used in the Commission's partial equilibrium model.

NTBs under the URA, without obligation to reduce their own tariffs and NTBs.¹² In the Commission's model, the reduction in tariffs and NTBs in the U.S. market was applied to imports from both GATT and non-GATT countries to more accurately approximate the results of the URA.

In a similar second simulation, other GATT countries were treated as a single market in which tariffs and the tariff equivalents for quantifiable NTBs were reduced while holding all other factors constant, including U.S. tariffs and NTBs. Estimates provided for the increase in U.S. production and employment and U.S. exports to the GATT market are upper bound estimates.¹³

All duty reductions used in this analysis were based on the latest duty offers available at the time that this report was prepared.¹⁴ In conducting this analysis, the Commission calculated average, trade-weighted current duties and duty reductions for each sector. This calculation is described in detail in appendix E. These duties excluded Canada and Mexico because many of the duty reductions under the URA will coincide with duty reductions scheduled to occur under NAFTA.¹⁵ Although certain goods already enter the United States free of duty under NAFTA, tariffs on other imports will be removed under a staged schedule that overlaps with the staging proposed by the URA. To the extent that estimates of the effects of the URA incorporate tariff reductions that would be made under preferential trade agreements in the absence of the URA, such estimates

¹² Taiwan formally applied for accession to the GATT in 1990. A working party was established in September 1992 to consider Taiwan's membership. The People's Republic of China (China) applied to resume its status as a contracting party to the GATT in 1986 and a working party was established in 1987 to review the compatibility of China's economy and trade system with GATT trade rules. The most recent meeting of the working party was in March 1994.

¹³ Because other GATT countries are treated as a single market, the simulation does not capture the effects that will result from the removal of border measures between other GATT countries. Consequently, the estimated results would tend to be overstated, since it is assumed that only U.S. exporters gain market share after tariff and NTB reductions. If each GATT-country market had been modeled separately to capture the reduction of trade barriers between them, the estimated U.S. price decline in GATT export markets, relative to GATT-traded prices, would have been smaller after liberalization.

¹⁴ Final U.S. tariff offers made as of Apr. 15, 1994, were used. Foreign tariff offers as of Feb. 15, 1994, were used; foreign tariff reductions were updated as revised foreign offers were received through Apr. 15, 1994.

¹⁵ NAFTA, concluded in Aug. 1992, is an agreement between the Governments of the United States, Canada, and Mexico. Under this agreement, tariff and nontariff measures currently are being reduced or eliminated on a progressive basis. Reductions in tariffs and NTBs between the United States and Canada under the U.S.-Canada Free-Trade Agreement were incorporated into the NAFTA.

are overstated and should be considered as upper bound estimates.¹⁶

To assess the estimated impact of the URA on U.S. trade, production, employment, and consumers, the Commission employed the following indicators: "negligible," "small," "modest," and "sizeable." It should be noted that these indicators are based on both qualitative assessments and quantitative analysis and therefore should be used as benchmarks rather than as precise measures of the likely impact of the URA on individual sectors.¹⁷ These indicators are defined as follows:

¹⁶ U.S. trade entering under preferential tariff provisions, such as the Generalized System of Preferences (GSP), the Caribbean Basin Recovery Act (CBERA), the U.S. Israel Free-Trade Area, and others, was not adjusted for in calculating average, trade-weighted sector tariffs, but was adjusted for on an individual sector basis, if significant.

¹⁷ Chairman Newquist notes that the economic modeling used to measure the effect of the Uruguay Round Agreements (URA) on various agricultural and industrial sectors provides only estimates regarding the likely economic impact of the URA. Such models rely on a number of assumptions and variables, and by their nature will differ according to the information sought and the judgment of the economist performing the modeling exercise. The Chairman notes that the model is a staff model and research aid, and has not been formally adopted as a "Commission model." (For example, a model used in the Commission's study, *The Likely Impact on the United States of a Free-Trade Agreement With Mexico* (investigation. No. 332-297), was referred to as a "Commission staff model".) Economic modeling is only one of several means Commission staff used to provide assessments of the likely impact of the URA for the Commission's consideration in adopting its final report.

negligible	a change of 1 percent or less;
small	a change of over 1 percent to 5 percent;
modest	a change of over 5 percent to 15 percent; and
sizeable	a change of over 15 percent.

Organization of the Report

This report is divided into nine parts, each of which contains chapters that deal with specific issues or economic sectors. The remainder of Part I reviews some of the most recent analyses of the likely impact of the URA on the U.S. economy as a whole.

Parts II-IX of this report contain the Commission's analyses of the likely longterm impact of the URA on 58 U.S. sectors, with additional comment by sector representatives as noted. Agriculture, fishery, and forestry sectors are covered in Part II (chapters 3-17); energy and chemical sectors in Part III (chapters 18-24); textile, apparel, and footwear sectors in Part IV (chapters 25-28); minerals and metals sectors in Part V (chapters 29-35); machinery and transportation sectors in Part VI (chapters 36-44); electronics sectors in Part VII (chapters 45-52); miscellaneous manufactures sectors in Part VIII (chapters 53-57); and service sectors in Part IX (chapters 58-63). Given that the URA are the first time that agriculture, textiles and clothing, and services have been subject to comprehensive multilateral disciplines, the sectors on agriculture, fishery, and forestry products, textiles and apparel, and services are prefaced by a discussion of the applicable GATT agreements (chapters 3, 25, and 58, respectively).

Volume II contains appendix F, consisting of trade tables showing exports, imports, and the trade balance for 1991-93, for the sectors and industries discussed in this report.

CHAPTER 2

Likely Impact of the URA on the U.S. Economy

This chapter reviews the likely economy-wide effects of the Uruguay Round Agreements (URA) on the United States, as estimated in recent empirical economic studies. First, the predictions of international trade theory and trade liberalization are discussed. Next, the merits and limitations of different types of economy-wide URA studies are examined. Finally, the findings of one linked macroeconomic model and five recent empirical studies that use computable general equilibrium (CGE) models are reviewed, and limitations in their methodologies are discussed.

Theoretical Implications of Multilateral Trade Liberalization

International trade theory predicts that multilateral liberalization of restrictive trade policies increases economic efficiency and enhances economic growth. By reducing barriers to global commerce, liberalization expands trade, encourages a more efficient allocation of resources, and increases national incomes. As economic efficiency increases, individuals enjoy greater disposable incomes, resulting in increased aggregate savings, investment, and growth)

Multilateral reduction of trade barriers draws resources from less productive uses to sectors of the economy where they will be more productive. As resources exit less productive sectors, domestic production and employment in those sectors fall. As production falls, imports rise to meet consumer demand. Increased imports may keep prices low and broaden purchaser choices, benefiting consumers. Increased imports may also reduce production and employment in competing industries. As resources move to industries where they are most productive and in which they have a comparative advantage,² production and employment in these sectors are expected to increase, as are exports. Although increased exports may increase domestic prices in the short run, reducing consumers purchasing power, increased exports also create jobs in the most productive industries, which tend to pay higher wages.

¹ For more information, see U. S. International Trade Commission (USITC), *The Dynamic Effects of Trade Liberalization: A Survey* (investigation No. 332-324), USITC publication 2608, Feb. 1993.

² A country has a comparative advantage in producing a good if it is more efficient at producing that good, relative to other countries.

Furthermore, trade theory predicts that as productive industries expand output, they also increase investment in capital equipment and in research and development. Higher levels of investment increase productivity and enhance product development, improving the growth rate of economies.

In the United States, it can be expected that multilateral trade liberalization under the URA likely will lead to: (1) an increase in exports by more productive U.S. industries; (2) an increase in imports of goods for which the United States does not have a comparative advantage; (3) an increase in disposable incomes; and (4) an improvement in U.S. economic growth.

Comparison of Models Used In Existing Studies of the Uruguay Round

The URA have been the focus of a number of economic studies, all of which have concluded that the agreements will result in net aggregate gains for most countries. Many of the recent studies are listed in figure 2-1. Only the results of the five CGE models completed in 1993 and the linked macroeconomic model were reviewed by the Commission, however, because CGE models are generally the most appropriate tool for estimating economy-wide effects of trade liberalization. This is because such models are based on microeconomic theory but are able to focus on economy-wide effects, capturing the complex interactions between various sectors within an economy and between different economies.

All of the economy-wide studies discussed in this chapter were conducted prior to the formal completion of the URA on April 15, 1994, and are based on varying assumptions about reductions in tariffs and nontariff barriers (NTBs). In the case of estimated tariff reductions, actual trade-weighted average tariff reductions for a country or region may be less than the 36-percent- reduction goal agreed to during URA negotiations. As a result, there is a tendency for all types of models to overstate aggregate gains from the URA.

A second limitation in all types of models is the lack of quantifiable measures for the liberalization of

Figure 2-1
Recent Studies Modeling Estimated Economy-wide Effects of the URA

- Brandao and Martin, (1993) - CGE model
Implications of Agricultural Trade Liberalization for the Developing Countries, World Bank working paper (March)
- Cline, (1994) - Partial equilibrium model
Evaluating the Uruguay Round, Institute for International Economics working paper
- Deardorff and Stern, (1990) - CGE model
Computational Analysis of Global Trading Arrangements, University of Michigan Press
- DRI/McGraw-Hill, (1993) - Linked macroeconomic model
Impacts of Trade Liberalization Under the Uruguay Round, a report prepared for the Office of the U.S. Trade Representative
- Francois, McDonald, and Nordstrom, (1993) - CGE model
Economywide Effects of the Uruguay Round, GATT background paper
- Goldin and Knudsen eds., (1990) - CGE model
Agricultural Trade Liberalization: Implications for Developing Countries, OECD and the World Bank
- Goldin, Knudsen, and van der Mensbrugge, (1993) - CGE model
Trade Liberalisation: Global Economic Implications, OECD and the World Bank
- Hufbauer and Elliott, (1994) - Partial equilibrium model
Measures the Cost of Protection in the United States, Institute for International Economics
- Nguyen, Perroni, and Wigle, (1993) - CGE model
An Evaluation of the Draft Final Act of the Uruguay Round, The Economic Journal
- Nguyen, Perroni, and Wigle, (1991) - CGE model
The Value of a Uruguay Round Success, The World Economy
- OECD, (1993) - CGE model
Assessing the Effects of Developed Country Trade Restrictions on Textiles and Apparel
- Trela and Whalley, (1990) - CGE model
Global Effects of Developed Country Trade Restrictions on Textiles and Apparel, The Economic Journal

many NTBs, particularly in areas such as government procurement and intellectual property rights. This omission of quantified liberalization agreements generally understates the aggregate economic welfare effects of the URA. In addition, for CGE and partial equilibrium models, benefits from increased trade are understated in the models examined in this chapter, because such models do not account for economies of scale,³ the benefits that will result from stronger trading rules, or the increase in long-term growth rates resulting from trade liberalization. It cannot be readily determined, however, whether the inclusion of overstated tariff reductions and omission of quantified liberalization agreements tend to over- or underestimate the likely gains expected from the actual URA; the non-quantifiable nature of NTBs precludes the estimation of the net effects. However, these economy-wide studies provide useful benchmark estimates of the general aggregate effects of the URA, and indicate the positive direction of economic change that is likely to occur. An overview follows of three types of models that have been used to estimate likely economy-wide effects of the URA: (1) partial equilibrium models; (2) linked macroeconomic models; and (3) computable general equilibrium models.

Partial equilibrium models

Partial equilibrium models are single-sector models of supply and demand and are often used to examine the effects of changes in trade policy on sectors of particular interest. Since such models examine narrow product categories, they are able to capture the likely direct effects of policy changes on individual sectors; such an approach is relatively simple in comparison to CGE and linked macroeconomic models. The main limitation of such models is that they do not capture interactions between various economic sectors.⁴ As a result, although partial equilibrium models are suitable for examining the direct effects of liberalization on narrow product categories, their economy-wide results may be suspect since they ignore effects on upstream, downstream, and substitute products. Because linkages are not taken into account, this Commission study does not include the partial equilibrium studies by Cline (1994), and Hufbauer and Elliott (1994) in the following discussion of the estimated economy-wide effects of the URA. Chapters 4-24 and 26-57 of this study employ a partial equilibrium approach to examine the direct effects of the URA on specific agricultural and industry sectors.⁵

³ Economies of scale occur when unit costs decrease as output increases.

⁴ For example, liberalization of sugar will affect soft drink manufacturers (a downstream industry), sugar cane and sugar beet production (upstream industries), and producers of high fructose corn syrup (a substitute product).

⁵ The Commission's partial equilibrium model was not used in analyzing the effect of the Uruguay Round

Macroeconometric models

One recent study of the likely economy-wide impact of the URA used a linked macroeconomic model, a type of model that generally provides insight into the possible dynamic effects of trade liberalization on economic growth and capital accumulation. Such models have certain limitations, however. First, linked macroeconomic models are not designed to examine multilateral trade liberalization, and hence, do not accurately model gains due to comparative advantage. As with other types of models, linked macroeconomic models are unable to address complex qualitative issues, such as intellectual property rights or foreign direct investment. In the case of the 1993 DRI/McGraw-Hill study that used such a model, the accuracy of the model's predictive power may be limited because it relies on hypothetical, "anticipated" growth rates in real national gross domestic product (GDP).

CGE models

CGE models are based on international trade theory, extensive production and trade data sets, and parameter estimates that reflect the economic structure of each country modeled. Estimates based on CGE models include gains from trade that take into consideration comparative advantage. Hence, the main advantage of the CGE approach is that these models capture not only the direct effect of reducing trade barriers, but also the effect of reductions on upstream and downstream industries, substitute products, and efficiency gains that occur as resources move to more efficient sectors.

However, CGE models have certain limitations that should be considered when interpreting their results. CGE models are based on very broad sectors⁶ and comparatively simple theoretical structures. Their structure limits the extent to which such models provide insight on the effects of the URA on relatively narrow sectors. As with other types of models, non-quantifiable measures that are too complex to fully capture, such as intellectual property protection, are omitted.⁷

The simple theoretical structures employed in the five 1993 CGE studies examined by the Commission are similar. All assume: (1) unit costs do not change as output changes; (2) individual firms in

⁵—Continued

Agreements (URA) on service and certain agriculture sectors, due to the difficulty in quantifying nontariff barriers (NTBs).

⁶ The 1993 models include between four and twenty aggregated commodities.

⁷ Sector-specific analysis conducted in this Commission study used a partial-equilibrium model to assess the likely impact of the URA on trade, production, and employment in more narrowly-defined categories. In addition, Commission staff used qualitative estimates to evaluate the likely impact of non-quantifiable provisions of the URA.

both the foreign and domestic markets are relatively small; (3) there is perfect competition; and (4) all economies are always at "full employment." With the exception of Goldin *et al.* (1993) and Branddo and Martin (1993), foreign-produced goods and domestically produced goods are assumed to be imperfect substitutes by all the recent CGE studies.⁸ Moreover, these CGE models are static rather than dynamic and their results should be interpreted as the changes expected to occur once all provisions of trade liberalization are in place. Finally, one of the 1993 CGE studies focuses on regional changes only (e.g., production changes for North America or the European Union), without providing separate results for the United States.

Estimated Economywide Impact of the URA

A discussion follows of the results of the five 1993 studies that employed CGE models, and the DRI-McGraw Hill study that employed a linked macroeconomic model to estimate the likely effects of the URA.

Impact on national income

Despite the commonalities between the five CGE studies reviewed by the Commission, there was wide

⁸ In these two studies, the assumption that foreign and domestic agricultural products are perfect substitutes implies that countries will specialize, and only export commodities for which they are the lowest cost producer. The assumption of imperfect substitution implies that countries both import and export a variety of products, even functionally identical products, due to such factors as differences in transportation costs or seasonal difference in the timing of production.

variation reported in the estimated impact of the URA on U.S. national income; results for a timeframe of 2002 to 2005 ranged between \$13 billion and \$60 billion (table 2-1). Disparities among models arise because of different databases and liberalization scenarios, and differences in aggregation of regions and sectors. In construction of model databases, for example, measurement parameters for the substitutability of foreign- and domestically-produced goods, such as the responsiveness of demand to changes in prices, vary from model to model. In addition, production and trade data may differ due to variations in techniques used to improve the consistency of the data.

Most of the 1993 studies attempted to base their liberalization scenarios as closely as possible on the concessions in the proposed Dunkel Draft of the Uruguay Round (Branddo and Martin), the Draft Final Act of the Uruguay Round (Nguyen *et al.*), or other "Uruguay Round-like" estimates (Goldin *et al.*).¹⁰ These different assumptions (see table 2-2) contributed to the variation in estimated effects. Francois *et al.* assumed reductions in manufacturing tariffs based on offers as of November 19, 1993, elimination of the Multifiber Arrangement (MFA) that currently regulates much of the global trade in textiles and apparel, reductions in agricultural production subsidies of 20 percent, and reductions in agricultural tariffs and

⁹ The \$60 billion figure is inferred to be the maximum increase in U.S. gross domestic product from Francois *et al.*, who report a figure of \$67 billion for the United States and Canada combined.

¹⁰ The Dunkel Draft was introduced in Dec. 1991 as a compromise text to serve as a basis for further negotiation. The "Draft Final Act of the Uruguay Round" was publicly released in Dec. 1993.

Table 2-1
National Income Effects of the Uruguay Round Agreements: A review of studies, predicted global effects, predicted effect on the United States, and on other regions

(In billions of 1992 dollars)

Country/Region	Brandao and Martin (1993)	Francois, McDonald, and Nordstrom (1993)	Goldin, Knudsen, and van der Mensbrugge (1993)	Nguyen Perroni, and Wigle (1993)	OECD (1993)
United States	13	67	(1)	36	28
Canada	2	(2)	(1)	4	7
Japan	17	(1)	(1)	27	42
OECD countries	(1)	(1)	135	(1)	(1)
European Union	31	98	(1)	61	71
EFTA ³	8	(1)	(1)	(1)	38
Global	139	230	213	212	274

¹ Not calculated by model.

² Francois *et al.* calculated the estimated national income effect for the United States and Canada combined.

³ Comprises Austria, Finland, Norway, Sweden, Switzerland, and Iceland.

Source: Brandao and Martin (1993), Francois, McDonald, and Nordstrom (1993), Goldin, Knudsen and van der Mensbrugge (1993), Nguyen, Perroni, and Wigle (1993) and OECD (1993).

Table 2-2
Assumptions of 1993 computable general equilibrium models: Reductions in tariffs and nontariff barriers, by sector

(Reduction in percent)

Model	Agricultural tariffs	Manufacturing tariffs	Agricultural export subsidies	Agricultural production subsidies	Nontariff barriers
Brandao and Martin	36	(1)	36	20	136
Francois et al.	(2)	(2)	36	20	³ 36
Goldin et al.	30	30	30	30	30
Nguyen et al.	⁴ 20-40	30	0	30	³ 40
OECD	36	36	36	36	36

¹ Branca() and Martin estimated reductions in tariffs and nontariff barriers (NTBs) only for the agricultural sector.

² Based on actual offers as of Nov. 19, 1993.

³ Reduction in NTBs includes the complete elimination of the Multifiber Arrangement (MFA).

⁴ Twenty percent in low-income regions, 40 percent in high income regions.

Source: Brandao and Martin (1993); Francois, McDonald, and Nordstrom (1993); Goldin, Knudsen, and van der Mensbrughe (1993); Nguyen, Perroni, and Wigle (1993); and OECD (1993).

quotas of 36 percent. In contrast, Goldin *et al.* assumed reductions of 30 percent in tariffs on non-agricultural commodities, and a similar reduction in agricultural subsidies and agricultural domestic supports. In Brandao and Martin, the large variation from the range of estimated increases in aggregate world welfare shown in the other four studies is due to the fact that this model focuses solely on the liberalization of agricultural commodities. Nguyen *et al.* included a rough estimate of liberalization of NTBs in services, while all other studies omit such estimates.¹¹

Variations in aggregation of commodities and regions may also contribute to differences in the estimated impact of the URA on national income.¹² Francois *et al.* aggregated the United States and Canada into a single region, while most other studies considered the United States and Canada as separate regions; Goldin *et al.* provided income estimates only for Organization for

Economic Cooperation and Development (OECD) countries as a bloc,¹³ and for the world. Similarly, relatively narrow commodities are sometimes

n Nguyen *et al.*, (1991, 1993), model the liberalization of trade in services by making a conservative guess as to the magnitude of the tariff equivalents for NTBs in services. Essentially, they assume ad valorem equivalents for NTB measures of 25 percent for developing countries and 10 percent for developed countries.

¹² Aggregation is necessary because limitations in computing power restrict the size of models.

¹³ Organization for Economic Cooperation and Development (OECD) countries include Australia, Austria, Belgium, Canada, Denmark, Finland, France, West Germany, Greece, Iceland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States.

aggregated into very broad product categories. For example, Goldin *et al.* and Brandao and Martin examine many agricultural commodities separately, while Francois *et al.* and Nguyen *et al.* aggregate all agricultural commodities into a single sector. While the estimated magnitude of the impact of the URA on U.S. real GDP and national income may vary, all recent CGE studies indicate that effects are likely to be small but positive. Estimates provided by the five CGE models indicate a one-time increase in GDP for the United States of between 0.2 and 1.0 percent.

DRI/McGraw-Hill estimated the impact of the URA using a linked macroeconomic model that captured capital accumulation and economic growth but did not account for gains due to comparative advantage. These results estimate that after the phase-in of the URA, domestic GDP in the year 2005 will be 4.2 percent larger than that expected in the absence of the URA.

In general, dynamic models suggest a one-time increase in GDP that is between two and three times those of static estimates because dynamic models consider macroeconomic factors not captured in CGE models.¹⁴

Impact on trade

Although CGE models do provide estimates of the likely effect of trade liberalization on trade flows, such estimates generally are not reported. Nguyen *et al.* estimate that world trade volume will increase by twenty percent. Francois *et al.* estimate increases of ten percent in world exports and eight percent in North American exports. No effects specific to the United States are reported. Moreover, no study provides estimates of the impact of the URA on imports.

¹⁴ See Baldwin, (1992), "Measurable Dynamic Gains from Trade," *Journal of Political Economy*, p. 170.

Impact on aggregate employment

While none of the most recent CGE studies estimated specific results for aggregate U.S. employment, the CGE study by Deardorff and Stern (1990) reports changes in aggregate U.S. employment under various multilateral liberalization simulations. Each of the liberalization simulations assumed total elimination of various tariffs or NTBs. For example, in one simulation, all tariffs were eliminated; in another, non-agriculture NTBs were eliminated. Under each liberalization simulation, the Deardorff and Stern model suggests that aggregate employment increases for every participating country. For the United States, predicted results are all positive but significantly less than one percent.

Impact on consumers

No results are reported on the effect of the URA on U.S. consumers. Francois *et al.*, however, estimate that world prices will fall by an average of 1.8 percent, providing some indication of positive consumer effects that could be expected in the United States. Increased national income (estimated between 0.2 percent and 1.0 percent), combined with a likely decrease in U.S. prices, implies that real income is expected to rise, increasing purchasing power.

Conclusion

In general, since CGE models are able to capture significant and complex interactions between upstream and downstream industries, industries that produce substitute products, and the shifting of resources among various sectors, they tend to provide the most reliable estimates of the effects of multilateral trade liberalization. Although they are unable to capture the more complex elements of the URA, results of the recent studies suggest that U.S. GDP will likely increase due to the URA and, in general, most other regions of the world are expected to gain as well. In percentage terms, the static gains in GDP are expected to be small, although the long-run dynamic growth effects of trade liberalization may be as much as two to three times the static estimates.

The likely effects of the URA on U.S. trade and consumers is not reported in these models, but can be inferred to be generally positive given aggregated estimates. While none of the recent studies report the likely impact of the URA on aggregate employment effects for the United States, one earlier study suggests that multilateral trade liberalization will likely result in a small increase in aggregate employment in the United States.

PART II
LIKELY IMPACT OF THE URA ON U.S.
AGRICULTURE, FISHERY, AND
FORESTRY SECTORS

Summary of the Likely Impact of the URA on U.S. Agriculture, Fishery, and Forestry Sectors

- U.S. agricultural sectors covered in detail in this report include livestock and meat; poultry and eggs; dairy; fish; sugar, other sweeteners, and ethanol; fruit and vegetable products; grain, milled grain, and animal feed; oilseed and oilseed products; beverages; tobacco and tobacco products; tropical and specialty agricultural products; wood and lumber products; paper, pulp, and printed matter; and cotton.
- Domestic agricultural producers are competitive but have faced global competition from subsidized commodities in many foreign markets. A number of U.S. agricultural sectors also benefit from domestic and export subsidies.
- The Agreement on Agriculture (agreement) is the most important Uruguay Round Agreement (URA) for the agriculture, fishery, and forestry sectors.¹ Under the agreement, tariffs will be reduced and section 22 quotas and Meat Import Act Voluntary Restraint Arrangements will be replaced by tariffs. Average domestic and foreign tariff reductions under the URA are generally small for most sectors (5 percentage points or less), as many U.S. agricultural imports enter duty-free under preferential tariff provisions or are subject to quota. Zero-for-zero tariff agreements were achieved in beer and certain distilled spirits, but not in wood products and oilseeds.
- Certain agricultural sectors will benefit under the Sanitary and Phytosanitary (SPS) Agreement, in part because of provisions for mutual acceptance of national inspection systems and adoption of a "regionality" provision that permits exports from certified disease-free areas within a country. Agricultural sectors likely to be most affected by SPS provisions include tobacco, fruits and vegetables, poultry, livestock and meat, beverages, and certain tropical and specialty products.
- Increased transparency and standardization of other import procedures should benefit many types of U.S. agricultural exports by reducing nontariff barriers frequently encountered. Other important provisions of the URA, and the principal sectors affected, include customs valuation (tobacco products); dispute resolution (alcoholic beverages and fish); preshipment inspection (wood and lumber; paper, pulp, and printed matter); rules of origin (wood and lumber); and technical barriers to trade (wood and lumber). In addition, provisions of the agreement on trade-related intellectual property rights likely will improve protection of U.S. seed patents and trademarks for brand names of cigarettes and certain alcoholic beverages.
- The trade effects of the URA on agricultural sectors of the U.S. economy are generally positive, increasing the overall level of trade, providing increased employment opportunities and benefitting consumers. Because the URA will increase both export opportunities and the level of imports for most agricultural sectors, the overall net trade effects are likely to show negligible to modest gains at the sector level.
- Exports are likely to grow by a small amount (over 1 percent to 5 percent) for livestock and meat, poultry and eggs, tropical and specialty products, and pulp, paper, and printed matter. Exports of fruits and vegetables, grains, and tobacco and tobacco products are likely to increase modestly (over 5 percent to 15 percent), and exports of dairy products and beverages will increase by a sizeable amount (over 15 percent). There are likely to be accompanying negligible to small increases (5 percent or less) in employment in most sectors.
- Certain industries are likely to experience small or negligible negative effects for production and employment, due to increased import competition as import restrictions are liberalized. These industries include the domestic peanut and vegetable oil industries and producers of certain processed fruits and vegetables, such as frozen asparagus, broccoli and cauliflower, canned mushrooms, and dehydrated onions and garlic. At the sector level, trade and production in oilseed and wood products may experience negligible negative effects due to the URA.

¹ The Agreement on Agriculture is discussed in detail in ch. 3.

CHAPTER 3

Agreement on Agriculture

The Uruguay Round Agreement (URA) on Agriculture' (agreement) is built around disciplines in four areas: market access, export subsidies, internal support,² and sanitary and phytosanitary (SPS) measures.² In addition, countries have agreed to a series of commitments to immediately increase liberalization in agricultural trade. These commitments are to appear in country market access schedules and represent formal GATT commitments (although percentage reductions are not specified in the agreement text). A broad agreement on agriculture was not part of previous GATT rounds of negotiations. SPS measures previously were covered under general GATT provisions (such as Article XX(b) and the Standards Code) that included a wide range of products.

The agreement incorporates certain commitments specified in the Memorandum of Understanding on Oilseeds and the Uruguay Round (the Blair House Agreement) reached by the United States and the European Union (EU) in November 1992.³ This memorandum spelled out conditions for resolving the oilseeds dispute between the United States and the EU, and also clarified the positions the two parties

¹ Agreement on Agriculture, Final Agreement Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations.

² Sanitary and Phytosanitary (SPS) measures are designed to protect human, animal, and plant life from pests and disease.

³ See U.S. Department of Agriculture (USDA), Office of Public Affairs, "U.S.-EC Agreement on Oilseeds and the Uruguay Round," in *USDA Background*, Nov. 20, 1992.

⁴ The oilseeds dispute revolved around impairment of duty-free access for oilseeds that had been previously negotiated under the GATT. The United States brought a complaint under GATT that European Union (EU) efforts to encourage domestic production of oilseeds by granting domestic subsidies impaired access to the EU market. The U.S. complaint was upheld by two successive GATT panels. Under the Blair House Agreement, the EU agreed to an acreage trigger for oilseed production, under which oilseed producers would receive smaller subsidy payments if EU acreage exceeded the trigger. The EU also agreed to ensure that byproducts produced from oilseeds on set-aside acres would not undermine the markets for oilseed exports, and to provide a reduced tariff rate on imports of 500,000 tons of corn into Portugal, beginning in 1993-94.

would take on other issues contained in the Dunkel Agricultural Text.⁵

Under the Blair House Agreement, the EU and the United States agreed to support a URA that would require a 20-percent reduction in the average level of internal support across commodities, as determined by an Aggregate Measure of Support (AMS) based on the 1986-88 period. The two parties also agreed to reduce the volume of subsidized exports by 21 percent and to reduce the value of export subsidies by 36 percent in value from a base of 1986-90. Additionally, the two parties agreed that internal support measures and export subsidies that conform to URA commitments would not be generally subject to countervailing under GATT subsidy rules; this provision is sometimes referred to as the "Peace Clause."⁶

Market Access

Reductions in Existing Tariffs

Under the agreement's market access provisions, developed countries have agreed to reduce existing tariffs on agricultural products by 36 percent on average, with a minimum tariff cut of 15 percent required for each product. The levels of reduction for developing countries are to be 24 and 10 percent, respectively.⁷ These tariff reductions are to occur from a 1986-88 base. The new tariff rates are to be phased in over a 6-year period in the case of developed countries, and over a 10 year period in the case of developing countries.

Tariffication of Nontariff Barriers

The URA identifies nontariff barriers (NTBs), including quotas, variable levies, and restrictive

⁵ The Dunkel draft was proposed by GATT Trade Negotiations Committee Chairman Arthur Dunkel on Dec. 20, 1991, as a compromise text to serve as the basis of further negotiations.

⁶ The final Agreement on Agriculture (agreement) incorporates some changes from the Blair House Agreement. Aggregate Measures of Support (AMS) reductions are required on the basis of a Total AMS, rather than on a commodity basis, and export subsidy reductions for developed countries can start from either 1986-88 or 1991-92 levels.

⁷ Existing tariffs that will be applied to in-quota quantities under tariff-rate quotas are not required to be reduced by any minimum amount.

licensing, that will be converted to tariffs under URA provisions ("tariffication").⁸ The tariffs established under tariffication are to follow the same reduction schedule as existing tariffs. The United States has agreed to replace section 22 import quotas for dairy products, certain animal feeds, peanuts, sugar-containing products, raw cotton, and the Meat Import Act of 1979 with tariff equivalents under the URA.⁹

The URA establishes a special safeguard for products subject to tariffication, allowing countries to impose a temporary additional duty when import volumes exceed a trigger level, or import prices fall below a trigger level.

Other Market Access Commitments

The agreement also guarantees a minimum level of access to any GATT market. If a country's imports of a product subject to tariffication exceeded 5 percent of domestic consumption during the 1986-88 base period, the country must maintain this current access under the URA. In cases where imports of a product subject to tariffication were less than 5 percent of domestic consumption during the base period, the country must establish a "minimum access quantity" for imports equal to 3 percent of base period consumption in the first year of the URA and increasing to 5 percent by the year 2000. Imports under the minimum access commitment will be subject to low or minimal duties, while imports over the minimum quantity will be subject to the tariff established under tariffication.

Annex 5 to the agreement provides for special treatment for primary and processed agricultural products. Under this annex, a country may exempt an agricultural product from tariffication, provided that (i) imports of the product composed less than 3 percent of domestic consumption in the 1986-88 base period; (ii) no export subsidies have been applied since the beginning of the base period; and (iii) effective production-restricting measures are applied to the primary agricultural product. Members may designate products for special treatment reflecting factors of non-trade concern, such as food security and environmental protection. In the event special treatment is chosen, a developed country must commit to an increase in minimum market access of 4 percent of base period consumption in the first year of the URA, increasing to 8 percent by 2000. A developing

⁸ Under the agreement, the tariff equivalent of a product covered by a nontariff barrier (NTB) is equal to the difference between the average internal price for the product and a representative average world market price for the same or a similar product. Tariff equivalents for processed products generally will be calculated on the basis of the tariff equivalents for the component products multiplied by their proportion in the product.

⁹ See chs. 4, 6, 8, 10, and 11 for more detail on changes in these support programs.

¹⁰ Agreement on Agriculture, Article 5, Final Agreement Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations.

country must commit to an increase in minimum market access of 1 percent of base period consumption in the first year of the URA, increasing to 4 percent by 2004. Two countries, Japan and Korea (as a developing country), have taken advantage of this provision for rice.

Export Subsidies

Export subsidies for agricultural products are defined by the agreement as subsidies "contingent upon export performance."¹¹ The agreement requires that all member countries establish ceilings for both the quantity of subsidized agricultural exports and budgetary outlays for these subsidies on a product-specific basis. By the year 2000, developed countries must reduce the quantity of subsidized exports from a 1986-90 base period by 21 percent and budgetary outlays for export subsidies by 36 percent. Over the same period, developing countries must reduce the quantity of subsidized exports by 14 percent and budgetary outlays for such subsidies by 24 percent. Developed countries may implement the reductions starting from the higher of their 1986-90 or 1991-92 levels,¹² whereas developing countries must establish their ceilings at 1986-90 levels. If a product did not receive export subsidies during the base period, the agreement prohibits countries from extending export subsidies to that product in the future.

For the United States, the quantity and value of export subsidies under the following programs likely will be reduced under the agreement: the Export Enhancement Program (EEP), the Dairy Export Incentive Program (DEIP), the Sunflower Oil Assistance Program (SOAP), and the Cottonseed Oil Assistance Program (COAP).¹³ Expenditures under U.S. export credit programs, the Market Promotion Program, and food aid programs will not be affected by this provision.¹⁴ The EU has agreed to reduce its

¹¹ Export subsidies identified by the agreement include direct subsidies, disposal of government stocks below market prices, producer-financed export subsidies, marketing subsidies, transportation and freight subsidies, and subsidies for commodities contingent on their incorporation in exported products. Agreement on Agriculture, Article 9. For information, see USDA, Foreign Agricultural Service (FAS), *Agricultural Provisions of the Uruguay Round* (Washington, DC), Jan. 1994, p. 12.

¹² After 6 years, all export subsidies must meet the required reductions based on the level of subsidies in 1986-90. The choice of whether to start export subsidy reductions from 1986-90 or 1991-92 levels affects the ceilings established in the intervening years between 1995 and 2000.

¹³ Reductions under these programs of subsidies for exports of eggs, wheat, durum, wheat flour and semolina, rice, vegetable oils, and some dairy products will start from a 1991-92 base, whereas reductions for other commodities will start from the 1986-90 base.

¹⁴ Article 10 of the agreement states that member countries will undertake to work toward the development of internationally agreed upon disciplines for export credits, export credit guarantees, and insurance programs, and that after agreement is reached, such programs will

export subsidies on beef, pork, poultry, eggs, dairy products, fresh and processed fruits and vegetables, wine, citrus, wheat, feed grains, rice, and sugar under the URA.¹⁵

Internal Support

The agreement classifies internal support programs as either non-trade-distorting (green) or trade-distorting (amber). Under the agreement, amber internal support programs will be subject to reduction commitments. The support provided by these policies is to be measured on a common basis—the AMS. The AMS for a specific commodity includes some or all of three components, expressed in national currency: (1) market price support, (2) non-exempt direct payments to producers, and (3) other internal policies subject to reduction.¹⁶ A Total AMS will be calculated for each country by totaling the individual AMS's for each commodity, and including support that is generally available to agricultural producers. Support that does not exceed 5 percent (10 percent for developing countries) of the value of crop-specific production in the case of product-specific support, or of total agricultural production in the case of non-product-specific support, is not required to be included in the AMS calculation.

The Total AMS will be capped at the 1986-88 base level and reduced by 20 percent in equal annual installments over 6 years, beginning in 1995. The AMS reduction obligation requires that in each year a country's Total AMS not exceed the new reduced cap established in the URA. Each country will be able to use its own discretion in deciding which policies to change to achieve the required reduction in the Total AMS.

A number of non-trade-distorting (green) programs are permitted under the agreement and are not subject to AMS reductions. These programs include research and extension services, pest and disease control, inspection services, stockholding for

¹⁴—Continued

be operated in conformity with international standards. Article 10 also states that food aid programs should be operated so that food aid is not tied to commercial exports, and that such programs be operated according to established international standards.

¹⁵ The EU has agreed to reduce its export subsidies on beef, poultry, eggs, cheese and some dairy products, wine (quantity only), and wheat and wheat flour, starting at 1991-92 levels. Other export subsidies are to be reduced starting from 1986-90 levels.

¹⁶ Market price support is measured by the gap between domestic and world market prices for the commodity, multiplied by the quantity of production eligible for support. Support provided through non-exempt direct payments is also measured using the price gap methodology. Other internal policies, such as storage payments and interest subsidies, are measured by government budgetary outlays or the revenue foregone by the government. The sum of the support provided by these 3 components, less producer assessments, equals the AMS for a specific commodity.

food security, domestic food aid, environmental and conservation programs, resource and producer retirement programs, regional aids, "structural" investment aids, crop insurance, disaster relief, "decoupled" direct payments that are based on fixed area and yield (or livestock numbers) and are not linked to current production, as well as income insurance and income safety-net programs.

Certain direct payments that are linked to production-limiting programs are amber-exempt policies. These payments are exempt, provided they meet a number of requirements.¹⁷ This particular provision exempts U.S. deficiency payment programs from AMS reduction commitments and exempts compensatory payments (direct aids) adopted under reform of the EU's Common Agricultural Policy (CAP), provided these aids are granted within the framework of production-limiting programs.

Countries that have reduced support for particular commodities since 1986 will receive credit for their cuts. Because the United States has reduced its support for many commodities under legislation subsequent to 1986, the United States will not need to make additional reductions in production support under the agreement. The EU reportedly also will not have to reduce internal support to meet agreement requirements because the compensatory payments set up under CAP reforms since 1988 are amber exempt policies. The EU Total AMS reportedly is already below the 20-percent reduction ceiling required by the agreement.¹⁸

Developing countries are required to reduce their AMS by 13 percent rather than 20 percent over a 10-year period. Some internal support policies by developing countries are exempt from agreement internal support reduction commitments. These include investment subsidies that are generally available to agricultural producers, support to encourage diversification away from production of illicit narcotic crops, and input subsidies to low-income or resource-poor producers.¹⁹

Peace Clause

A so-called "peace clause" of the agreement (Article 13) shields a number of domestic support programs and agricultural export subsidies from dispute settlement for the 6-year phasing of the

¹⁷ Agreement on Agriculture, Article 6. The payments must be (1) based on fixed area and yields, or (2) made on 85 percent or less of base level of production, or, (3) in the case of livestock, made on a fixed number of head. The exclusion of these types of direct payment programs from AMS reductions commitments was included in the Blair House Agreement.

¹⁸ USDA official, U.S. International Trade Commission (USITC) staff telephone interview, May 23, 1994.

¹⁹ Agreement on Agriculture, Article 6.

agreement.²⁰ The peace clause exempts domestic agricultural subsidies permitted by the agreement (green policies) from countervailing duties and most challenges in the GATT. Domestic support measures that are in compliance with agreement requirements, including amber exempt policies, and export subsidies are exempt from most GATT challenges. These policies are also exempt from the imposition of countervailing duties, unless a determination of injury or threat of injury is made under article 6 of the GATT and part 5 of the Agreement on Subsidies and Countervailing Measures.²¹

Sanitary and Phytosanitary Measures

The primary aim of the agreement on SPS measures²² is to eliminate the arbitrary use of such measures by member countries to restrict trade, while allowing countries to maintain justifiable domestic protective measures. The SPS agreement also attempts to gradually bring SPS measures employed by developed and developing countries to a comparable level.

The basic elements of the SPS agreement are similar to those contained in its predecessor, the previous agreement on Technical Barriers to Trade

²⁰ In last-minute negotiations, the EU and the United States agreed to extend the Peace Clause for 3 years beyond the 6-year duration of the agreement phasing-in.

²¹ Agreement on Subsidies and Countervailing Measures, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement defines prohibited, actionable, and non-actionable subsidies; and sets forth rules for imposition of countervailing measures in accordance with article VI of the GATT 1994 with respect to goods benefiting from prohibited or actionable subsidies.

²² Agreement on the Application of Sanitary and Phytosanitary Measures, Final Agreement Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations.

(Standards Code). However, while the Standards Code did not differentiate between industrial and agricultural products, the new SPS agreement specifically and exclusively addresses sanitary and phytosanitary measures. Additionally, the SPS agreement requires for the first time that SPS measures be based on scientific analysis and risk assessment, that members recognize equivalency, and that they recognize regional disease areas. In addition, the new SPS agreement is binding on all signatory members to the World Trade Organization, whereas the Standards Code allowed members to withdraw or maintain bilateral exemptions.

U.S. Industry Positions on the URA

A coalition of 22 U.S. agriculture organizations²³ indicated that while the URA provide an opportunity for expanded export sales and reduced trade barriers, they do not eliminate all trade distorting practices; especially noteworthy are permitted "green" subsidies. The coalition advocates implementing legislation that maintains and redirects U.S. Government funding of current agricultural programs. The coalition notes that such legislation is important if the organizations are to support the URA.

²³ Members of the coalition include American Farm Bureau Federation, American Meat Institute, American Sheep Industry Association, American Soybean Association, Coalition for Food Aid, National Association of State Departments of Agriculture, National Association of Wheat Growers, National Barley Growers Association, National Cattlemen's Association, National Corn Growers Association, National Cotton Council, National Council of Farmer Cooperatives, National Farmers Union, National Grange, National Milk Producers Federation, National Pork Producers Council, National Potato Council, National Sunflower Association, National Turkey Federation, Rice Millers Association, United Fresh Fruit and Vegetable Association, and U.S. Rice Producers Group. For more information on positions by other sector representatives, see discussions in chs. 4-17.

CHAPTER 4

Livestock and Meat¹

Table 4-1
Livestock and meat: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	1,700	1,700	1,700	0.0
Trade data (million dollars):				
Shipments ²	49,326	47,316	49,245	-0.2
U.S. exports:				
Total	5,845	6,193	6,069	3.8
GATT ³ signatories	5,494	5,906	5,725	4.2
Other	351	286	344	-2.0
U.S. imports:				
Total	5,197	5,313	5,648	8.7
GATT signatories	5,024	5,137	5,475	9.0
Other	172	176	173	0.4
U.S. trade balances:				
Total	648	879	421	(4)
GATT signatories	470	769	250	(4)
Other	179	111	171	(4)
Consumption	48,678	46,436	48,824	0.3
Import market share (percent):				
Total	10.7	11.4	11.6	(4)
GATT signatories	10.3	11.1	11.2	(4)
Other	0.4	0.4	0.4	(4)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² Shipments include beef, pork, and lamb meat.

³ General Agreement on Tariffs and Trade (GATT).

⁴ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Import and export data compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

As a result of the Uruguay Round Agreements (URA), there likely will be a small improvement (over

¹ The following product groups are covered in the discussion of this industry sector: cattle and beef; swine and pork; sheep and meat of sheep; hides, skins, and leather; furskins; and wool and other animal hair. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on qualitative factors. The

1 percent to 5 percent) in the trade balance in meat. The changes in trade will result primarily from increased market access and subsidy reductions rather than from domestic and foreign tariff reductions. However, trade in live animals is not expected to increase, since live animals are costly and impractical

²—Continued
complexity of calculating foreign subsidy reduction and of quantifying the reduction or elimination of agricultural quotas and tariff-rate-quotas precluded use of the Commission's sectoral model. For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

to transport. The livestock and meat sector is expected to show a small increase in U.S. production and a negligible increase (1 percent or less) in employment. The impact of the URA on U.S. consumers is likely to be small, reflecting the sector's competitive advantage in the U.S. market. The agreements on Agriculture and Sanitary and Phytosanitary (SPS) Measures are the most important URAs for this sector.

U.S. production of red meat consists mainly of beef and veal, pork, and lamb. The competitive position of the U.S. livestock and meat sectors is generally enhanced by the relative low price and availability of grain for feed. Thus, the United States tends to be competitive in the production and export of grain-fed beef and pork. Other countries that have large areas of relatively low-cost grassland, such as Australia, New Zealand, and Argentina, also tend to be competitive in the production of grass-fed beef and lamb.

Although cattle are raised and beef is processed throughout the United States, production is concentrated in the Western Rangelands,⁴ the Corn Belt,⁵ and the Southeastern States.⁶ Swine raising is concentrated in the Corn Belt States and to a lesser extent the Southeastern States. The Corn Belt has the greatest number of sheep-raising operations; however, the Western States accounted for over 77 percent of the sheep population in 1993.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated U.S. ad valorem equivalent rate of duty for the U.S. livestock and meat sector was 2 percent in 1993, which is to be reduced to 1.5 percent under the URA. The United States has agreed to reduce its tariff on fresh, chilled, or frozen pork from 2.2¢/kilogram (kg) to 1.40/kg, and the tariff on certain lamb meat is to be reduced from 1.10/kg to 0.70/kg. U.S. tariffs on beef will not be reduced. The major suppliers of the subject meats are Canada, Australia, New Zealand, and Mexico.

Japan, Korea, Canada, Mexico, and the European Union (EU) are among the most important GATT

³ These agreements are discussed in detail in ch. 3.

⁴ The Western Rangelands include the States of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming.

⁵ The Corn Belt consists of the States of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, and Wisconsin.

⁶ The Southeastern States are Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.

markets for U.S. meat exports.⁷ Under the URA, Japan has agreed to reduce its beef tariff from 50 to 38.5 percent ad valorem, subject to special safeguard provisions, and South Korea has agreed to reduce its tariff on frozen pork from 37 to 25 percent ad valorem. The South Korean tariff on imported beef is to be reduced from 44 to 40 percent ad valorem in 1995, while the minimum access quantity will increase from 106,000 to 225,000 metric tons. The EU has agreed to convert its variable import levies on certain pork into a global tariff-rate quota of 75,000 tons and will eliminate its 7 percent ad valorem duty on fresh, chilled, and frozen swine and beef livers.

Other Provisions

Under the Agriculture agreement, the United States⁸ has agreed to replace the Meat Import Act of 1979 (Act) with a tariff-rate quota. The in-quota quantity (quota) for beef and veal will be established at 634,621 tons in the first year of the agreement and will increase to 656,621 tons by the end of the implementation period (currently scheduled for the year 2000). The quota for fresh, chilled, or frozen beef is to be increased by an additional 20,000 tons each for Argentina and Uruguay, if these countries meet U.S. sanitary requirements (that is, they are found to be free of foot-and-mouth disease and Rinderpest).

Since 1980 when the Act became effective, imports of quota-type beef and veal (excluding imports from Canada)⁹ have ranged from 442,389 tons in 1984 to 630,584 tons in 1988. The maximum quota on imports in the last year of the URA would be 4 percent more than peak levels of imports in 1988 and 32 percent greater than the lowest level of imports in 1984. No change is required in the existing rate of 4.40/kg that is applicable to in-quota quantities. However, the tariff rate applicable to above-quota quantities of fresh, chilled, or frozen beef and veal (but not other meats subject to the Act) is to be 31.1 percent ad valorem in the first year of the URA, to be reduced in equal annual installments over 6 years to 26.4 percent ad valorem, a 15 percent reduction from the original rate.

⁷ Canada and Mexico accounted for an estimated 17 and 11 percent of U.S. exports of meat, respectively, in 1993. Duties on such exports are to be reduced under the North American Free-Trade Agreement (NAFTA). For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993, p. 27-2.

⁸ The Meat Import Act of 1979 is applicable to U.S. imports of fresh, chilled, or frozen beef (which has accounted for the great bulk of sector imports under the Act), veal, mutton (but not lamb meat), goat meat, and certain prepared or preserved beef.

⁹ U.S. Department of Agriculture (USDA), Economic Research Service (ERS), *Effects of the Uruguay Round Agreement on U.S. Agricultural Commodities*, Mar. 1994, p. 31.

¹⁰ Imports from Canada are excluded because such imports were excluded from the Meat Import Act of 1979 under NAFTA.

The United States also agreed to reduce the quantity and value of government-assisted beef and pork exports by 21 and 36 percent, respectively, from the base period. The annual allowable quantity of U.S. Government-assisted beef exports will be 17,589 tons in the last year of the agreement, scheduled to be 2000, and the annual allowable budgetary outlay will be reduced to \$22.8 million. U.S. Government-assisted pork exports will be reduced to 395 tons, a 21-percent reduction from the 1986-90 base period, and the allowable budgetary outlay will be reduced by 36 percent to \$497,000.¹¹

Under the URA, many major U.S. trading partners have also agreed to increase market access. Japan has agreed to reduce its minimum import price (gate price) for pork by 29 percent but will retain safeguard provisions.¹² In the final year of the URA the gate price for pork is to range from 361 yen/kilogram (kg) to 482 yen/kg (US\$ 4.33 yen/kg based on 1993 annual average exchange rate) depending on the product. In addition, South Korea has agreed to remove all nontariff barriers to imports of frozen pork in 1997. Under the URA, the maximum allowable quantity of EU subsidized pork exports is to decline by 21 percent by the last year of the agreement.¹³ The maximum budgetary expenditure for pork is 113 million ECU (US\$132 million annual average exchange rate for 1993).¹⁴ The EU maximum allowable quantity of government-assisted beef exports is to be 817,000 tons in the last year of the agreement. The maximum budgetary expenditure is to be reduced to 1.26 billion ECU (US\$1.48 billion). Certain European Free-Trade Association (EFTA) countries¹⁵ have also agreed to increase their market access for pork and beef. There is no indication that foreign countries have committed to reducing production subsidies with respect to meat and livestock.

The SPS agreement of the URA may also have a modest positive impact on the level of U.S. imports because of the provision for regionalization. This means that countries that can provide necessary evidence that areas within their territories are pest or disease-free should be allowed to export products from the region to member countries, even though the entire country does not meet URA sanitary or phytosanitary

¹¹ Submission received at Agriculture Technical Advisory Committee (ATAC) meeting, *Agricultural Provisions of the Uruguay Round Agreement*, Jan. 7, 1994.

¹² *Report of the Agriculture Technical Advisory Committee (ATAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994, p. 14.

¹³ The maximum allowable quantity of European Union (EU) subsidized pork exports (in the last year of the agreement) will be 389,000 tons, which is 103,000 tons below the average quantity of subsidized EU exports in 1986-88.

¹⁴ Submission received at ATAC meeting, *Agricultural Provisions of the Uruguay Round Agreement*, Jan. 7, 1994.

¹⁵ Austria, Finland, Iceland, Liechtenstein, Norway, Sweden, and Switzerland.

standards.¹⁶ Possibly the most important implication for the United States is that regions of some countries, such as parts of Argentina, could be found to be free of Rinderpest and foot-and-mouth disease and thus be eligible to ship fresh, chilled, or frozen meat to the United States.

Likely Impact on U.S. Trade

The effect of the URA likely will be a small overall improvement in U.S. trade balance in the meat sector. The changes in trade will result primarily from increased market access and subsidy reductions, rather than from domestic and foreign tariff reductions.

A small increase is expected in U.S. imports of beef as the Meat Import Act of 1979 is replaced with a tariff-rate quota. The bulk of increased beef imports are expected to come from traditional suppliers—Australia and New Zealand. There likely will be a negligible effect on U.S. imports of livestock, pork, and lamb meat as a result of the URA.

It is likely the URA will result in a small increase in U.S. sector exports, primarily of beef. Exports of pork will increase to a modest degree (over 5 percent to 15 percent). There likely will be a negligible increase in U.S. exports of livestock and lamb meat. The expected increases in U.S. exports will be to Japan and South Korea, and to a lesser extent the EU and minor markets.

Likely Impact on U.S. Production, Employment, and Consumers

Production in this sector is expected to show a small increase, primarily because of increased market access and reduced foreign subsidies for pork, and to a lesser extent, beef. However, the effect on overall employment is expected to be negligible, as there appears to be sufficient underutilized capacity in the U.S. swine-growing and pork-packing sectors to supply any likely increase in U.S. exports.¹⁷

The impact of the URA on U.S. consumers of these products is likely to be small, because only minor decreases in the price of imports and even smaller declines in the price of competing U.S. products are expected. Increased imports from GATT countries may increase the variety of available products, contributing to a small gain by U.S. consumers.

¹⁶ *Report of the Advisory Committee on Trade Policy and Negotiations (ACTPN) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994, pp. 104-107.

¹⁷ For more information, see USITC, *Potential Impact of the North American Free-Trade Agreement*, USITC publication 2596, Jan. 1993, p. 27-2.

U.S. Industry Positions on the URA

The Agricultural Technical Advisory Committee (ATAC) for Trade in Livestock and Livestock Products generally favors the URA, citing improved market access, improved sanitary regulations, reduced export subsidies by competitors, and an improved dispute settlement process.^{18,19} The ATAC contends, however, that the U.S. sheep industry is placed at a disadvantage because foreign sheep producers receive extensive government assistance, whereas the National Wool Act, a U.S. government program, is scheduled for elimination. Some representatives of the U.S. sheep industry are also critical of the URA because most of the important sheep producing countries did not commit to reducing internal price supports. According to the American Sheep Industry Association (ASIA), lamb and wool producers in foreign countries benefit from government support.²⁰ The Livestock and Livestock Products ATAC has reserved endorsement of the URA until its members have had an opportunity to completely review and analyze foreign offers.

The National Cattlemen's Association (NCA) passed a resolution in support of URA at its annual meeting in February 1994, and the National Pork Producers Council (NPPC) strongly supports the URA. The NPPC estimates that U.S. pork exports will increase substantially as market access becomes available and subsidies and other trade barriers are

¹⁸ *ATAC Report*, Jan. 1994.

¹⁹ American Textile Manufacturers Institute, official submission to USITC, Apr. 19, 1994. The Institute indicated its agreement with the ATAC position.

²⁰ Peter Orwick, Director of Government Affairs and Natural Resources, American Sheep Industry Association (ASIA), official submission to USITC, Mar. 8, 1994.

removed.²¹ According to the NCA, the SPS agreement will assist in solving health and sanitary disputes.²²

Other import interests contend that even if the URA are adopted, the U.S. market for meat will still be too restricted.²³ They contend that the above-quota tariffs for meat, even after phased reductions, will probably prohibit above-quota imports. They also criticize the lack of transparency in the entire URA negotiations, including details of implementation and operation, which limit the ability of companies to adjust business practices.

According to the New Zealand Meat Producers Board²⁴ (Board), a statutory body representing the livestock producers of New Zealand, the replacement of the Meat Import Act with a tariff-rate quota likely will have little impact on import volumes, but will relieve the short term dislocations caused by the imposition of voluntary restraint agreements. The Board suggests that the overall effect of the URA will be positive for the U.S. beef industry.

The Florsheim Shoe Company (Florsheim), a Division of Interco, Inc. identifies itself as the largest domestic manufacturer of quality men's dress shoes and a major consumer of imported leather.²⁵ Florsheim supports the elimination or reduction of the duties assessed on imported calfskin, kidskin, and sheepskin leather, contending that there are no U.S. tanners currently supplying calfskin, kidskin, and sheepskin leather.

²¹ The National Pork Producers Council, facsimile press release, "Pork Producers Endorse GATT Agreement," Feb. 28, 1994.

²² Rod Smith, ed., "GATT Seen as Global Beef-Demand Stimulant," *Feedstuffs*, Jan. 17, 1994, pp. 1 and 13.

²³ Officials and counsel for the New Zealand Embassy, USITC staff conversations, Mar. 9, 1994.

²⁴ Edward J. Farrell, Bronz and Farrell, on behalf of the New Zealand Meat Producers Board, official submission to USITC, May 2, 1994.

²⁵ Steven P. Sonnenberg, Anderson & Rodriguez, on behalf of The Florsheim Shoe Co., a Division of Interco, Inc., official submission to USITC, May 2, 1994.

CHAPTER 5

Poultry and Eggs¹

Table 5-1
Poultry and eggs: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	191	196	202	5.8
Trade data (million dollars):				
Shipments	26,225	27,425	28,796	9.8
U.S. exports: •				
Total	1,071	1,185	1,362	27.2
GATT ² signatories	885	1,049	1,121	26.7
Other	186	136	241	29.6
U.S. imports:				
Total	48	50	58	20.8
GATT signatories	47	48	55	17.0
Other	1	2	3	200.0
U.S. trade balances:				
Total	1,023	1,135	1,304	(³)
GATT signatories	838	1,001	1,066	(³)
Other	185	134	238	(³)
Consumption	25,202	26,290	27,492	9.1
Import market share (percent):				
Total	0.2	0.2	0.2	(³)
GATT signatories	0.2	0.2	0.2	(³)
Other	(⁴)	(⁴)	(⁴)	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

⁴ Less than 0.05 percent.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The net effect of the Uruguay Round Agreements (URA) on net trade in the poultry and egg sector likely will be positive although small (over 1 percent to

¹ The following product groups are covered in the discussion of this industry sector: poultry and eggs. See app. F, vol. II, for trade tables for this sector and these groups.

Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's

5 percent), as export opportunities increase and U.S. imports remain limited by sanitary and phytosanitary (SPS) considerations. The net effect of the URA on U.S. production and employment is expected to be positive but negligible (1 percent or less). The effect of the URA on U.S. consumers likely will be

²—Continued

sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

negative but negligible, as prices may rise somewhat. Agreements on Agriculture and SPS Measures are the most important URAs for this sector.³

The U.S. poultry and egg sector comprises two distinct industries, both of which are among the world's most competitive producers. The U.S. poultry industry leads the world in poultry exports and production, accounting for a 23-percent⁴ share of the world market and 31 percent of total production in 1992, and is forecast to increase its market share to 27 percents by 1994.⁶ The U.S. egg industry trails only the Netherlands⁷ in egg exports and China in egg production.

The primary competitive factor for the U.S. industries is relatively low costs of feed, mainly corn and soybeans. Also contributing to the competitiveness of the U.S. industry are the use of advanced production technologies and relatively low labor costs.⁸ In addition, health and sanitary restrictions have limited U.S. imports, which typically account for a minuscule portion of the domestic market.

Broiler production, which accounts for 80 percent of domestic poultry production, and associated hatching egg production are concentrated in Arkansas and the Southeast region of the United States, particularly Alabama, and Georgia. Turkey production and related hatching egg production are concentrated in North Carolina, Minnesota, and California. Table egg production occurs throughout the United States; California, Georgia, Arkansas, Indiana, and Pennsylvania are the leading egg-producing states.

³ The Agreements on Agriculture and Sanitary and Phytosanitary Measures are discussed in detail in ch. 3.

⁴ This share is in terms of single countries. The European Union (EU) as a group, including intra-EU trade, leads the world with a share of 46 percent in 1992. Excluding intra-EU trade, the EU share drops to 23 percent, the same as the U.S. share.

⁵ Thirty-seven percent, excluding intra-EU trade.

⁶ U.S. Department of Agriculture (USDA), Foreign Agricultural Service (FAS), *Poultry: World Markets and Trade*, Circular Series FL&P 1-94, Jan. 1994, p. 15.

⁷ The bulk of the Netherlands' egg exports represent intra-EU trade.

⁸ U.S. labor costs are low compared with other developed countries, such as those in the EU. The U.S. poultry industry generally is located in areas of the country with relatively low labor rates, such as the South and the Southeast.

⁹ U.S. imports of live poultry and certain poultry meat are restricted to certain countries certified to be free of various poultry and poultry-borne diseases, including viscerotropic velogenic Newcastle disease and other diseases. Imports of live poultry must be quarantined for 30 days. Countries approved to export poultry meat to the United States, as of Apr. 1994, were Canada, France, Hong Kong, Israel, and the United Kingdom (9 CFR 381.196). U.S. imports of shell eggs generally are restricted to Australia, Canada, Chile, Denmark, Fiji, Finland, Great Britain, Iceland, New Zealand, Northern Ireland, Norway, Republic of Ireland, and Sweden (9 CFR 94.6). U.S. imports of egg products generally are restricted to Canada and the Netherlands.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The U.S. ad valorem equivalent tariff for sector imports, based on imports in 1993, was approximately 2.2 percent. The tariff on poultry was 3.9 percent while that on eggs was 1 percent. Tariffs are relatively high (about 12 percent) for fresh or chilled livers (other than fatty livers of geese or ducks) and for dried whole eggs (27 percent). In general, most U.S. duties are to be reduced 0.7 percentage point (equivalent to a 31 percent reduction) in six equal stages, beginning in 1995.

The following tabulation shows tariff ranges faced by U.S. exports of poultry and eggs in major GATT markets:

Market	Tariff range (percent ad valorem)
Canada	0-297.9
Mexico	50-260
Hong Kong	0 (bound under URA)
Japan	0-25
EU	3-100+ (subject to variable levies)
Poland	100-200
Singapore	27
Korea	20-35

Under the tariff provisions of the market access agreement, average tariffs in major GATT markets for U.S. exports are to drop approximately 11.5 percentage points. Important improvements in market access for sector products include Canada, which has agreed to convert quantitative import quotas to tariff equivalents;¹⁰ Hong Kong, which has agreed to bind tariffs at zero for all poultry and egg products; Japan, which has agreed to reduce tariffs on frozen chicken legs and dried and frozen egg yolks; the European Union (EU), which has agreed to convert variable levies to tariff equivalents, establish an increasing tariff-rate quota, and reduce the tariff on processed turkey; and Korea, which has agreed to eliminate quantitative restrictions and to reduce the tariffs on various chicken products.

¹⁰ Tariff rates for Canada and Mexico will be reduced under provisions of the North American Free-Trade Agreement (NAFTA).

¹¹ Canadian tariffification of poultry imports is the subject of ongoing bilateral negotiations, as of June 1, 1994. Under the original Canada-United States Free-Trade Agreement, the Canadian import quota for chicken was set at 7.5 percent of the previous year's domestic production. Under the URA, the quantity allowed at the under-quota tariff level is approximately 6 percent of production, and the above-quota tariffs are prohibitive. U.S. interests argue that the NAFTA provisions prevail over those in the URA, while Canada maintains the opposite.

Other Provisions

Other agreements likely to affect the U.S. poultry and egg sector are those on export subsidies¹² and SPS measures. Under the export subsidy provision of the URA, the U.S. sector likely will benefit from the required reductions in EU export subsidies. In general, the export subsidy commitment is to reduce the volume of subsidized exports by 21 percent and subsidy expenditures by 36 percent between 1995 and 2000.¹³ Although not likely to result in an increase in U.S. exports to the EU, these reductions may enhance the competitiveness of U.S. poultry and egg exports in third-country markets, particularly in the Middle East and Asia. The following tabulation shows the reduction in export subsidies agreed to by the United States and the EU:

Country, product, and basis	Year	
	1995	2000
United States:		
Poultry:		
Quantity (1,000 metric tons)	34	28
Budget (\$1,000)	21,377	14,555
Eggs:		
Quantity (1,000 dozen)	30,262	6,920
Budget (\$1,000)	7,588	1,604
EU:		
Poultry:		
Quantity (1,000 metric tons) .	440	291
Eggs:		
Quantity (1,000 metric tons) .	107	83

The SPS agreement likely will change the global trading environment for the poultry and egg sector in ways and to a degree that are still unclear. Mutual acceptance of inspection systems (equivalence versus identicalness) under the SPS agreement may open the U.S. market to imports of poultry and eggs that are currently restricted by disease and sanitary regulations. Regionalization provisions relating to diseases may prohibit imposition of future SPS import restrictions on a country-wide basis when a disease problem is confined to a limited geographic area within that country.

Likely Impact on U.S. Trade

The net effect of the URA on U.S. trade in the poultry and egg sector is expected to be positive but

¹² Agreement on Subsidies and Countervailing Measures, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement defines prohibited, actionable, and non-actionable subsidies; and sets forth rules for imposition of countervailing measures in accordance with article VI of the GATT 1994 with respect to goods benefiting from prohibited or actionable subsidies.

¹³ The base period is either the annual average during 1986-90 (U.S. poultry) or 1991-92 (the remainder), whichever is greater.

¹⁴ Imports of poultry and eggs will continue to be regulated by relatively strict U.S. SPS provisions.

small, according to the Commission's sectoral model. U.S. poultry and egg imports should experience a negligible change because U.S. duties are already relatively low, existing SPS restrictions likely will continue to limit certain imports, and the U.S. industry is expected to maintain its competitive advantage in the domestic market. Imports typically account for less than 1 percent of U.S. consumption. It is probable that U.S. poultry and egg exports will increase by a small amount due to EU export subsidy reductions that will result in improved market access in EU and Asian markets. Exports typically account for about 5 percent of U.S. production. The URA are not expected to result in significant geographic trade shifts.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, U.S. poultry production and employment likely will experience a negligible rise due to the URA. Increased production and employment due to increased exports will more than offset decreases due to increased imports. However, a long-term trend toward increased mechanization in the sector may mitigate any positive employment effects. The regional impact likely will be greatest in the major U.S. producing areas mentioned above. The URA are expected to have a negligible effect on U.S. consumers of poultry and eggs. Small increases in export levels and existing SPS restrictions will probably limit imports, leading to a negligible price increase for domestic products.

U.S. Industry Positions on the URA

The Agricultural Technical Advisory Committee (ATAC) for Poultry and Eggs generally supports the URA." The ATAC supports and recognizes progress under the URA in the reduction of internal policies that distort trade, the reduction of export subsidies, the conversion of nontariff barriers to tariff equivalents, and the establishment of a science-based SPS system. However, the ATAC expressed specific concern about the outcome of bilateral negotiations between the United States and Canada regarding the conversion of absolute quotas under the Canadian supply management system to tariff equivalents for poultry and eggs. The ATAC also expressed concern that U.S. reductions in egg export subsidies are disproportionately large compared with EU reductions and create a potential competitive disadvantage for U.S. exporters.

¹⁵ Report of the Agriculture Technical Advisory Committee (ATAC) on the Uruguay Round of Multilateral Trade Negotiations, Jan. 1994.

CHAPTER 6

Dairyl

Table 6-1
Dairy: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	770	785	784	1.8
Trade data (million dollars):				
Shipments	44,000	48,000	47,000	6.8
U.S. exports:				
Total	325	593	655	101.8
GATT ² signatories	281	394	440	56.5
Other	44	200	215	393.7
U.S. imports:				
Total	756	845	836	10.5
GATT signatories	747	826	816	9.3
Other	10	19	20	100.0
U.S. trade balances:				
Total	-431	-252	-181	(³)
GATT signatories	-466	-432	-376	(³)
Other	34	181	195	(³)
Consumption	44,431	48,252	47,181	6.2
Import market share (percent):				
Total	1.7	1.8	1.8	(³)
GATT signatories	1.7	1.7	1.7	(³)
Other	(⁴)	(⁴)	(⁴)	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

⁴ Less than 0.05 percent.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will have a negligible effect (1 percent or less) on the U.S.

¹ Dairy produce is covered in this industry sector. See app. F, vol. II, for trade tables for this sector.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on qualitative factors. The complexity of calculating foreign subsidy reduction and of quantifying the reduction or elimination of agricultural quotas and tariff-rate-quotas precluded use of the Commission's sectoral model. For more information on

dairy sector because of the offsetting effects of a sizeable increase (over 15 percent) in U.S. imports and a sizeable increase in U.S. exports of dairy produce.³ However, there likely will be only a negligible effect on U.S. production and employment as imports generally account for 2 percent or less of the U.S.

²—Continued

the methodology used in the Commission's analysis, see ch. 1 and app. E.

³ Because agreements between the United States and Canada are still being negotiated for dairy produce, as of June 1, 1994, negligible changes in net trade could not be characterized as positive or negative.

market. As a result, there likely will be only a small (over 1 percent to 5 percent) positive impact on consumers of dairy produce as a result of the URA. The Agreement on Agriculture is the most important URA for this sector.⁴ Increased market access and reduced export subsidies likely will have a more significant effect on international trade than will tariff reduction.

International trade in fluid dairy products is generally limited because they are highly perishable,⁵ transportation costs are high relative to product value, and most countries impose sanitary and phytosanitary (SPS) measures that restrict trade. Consequently, the bulk of international trade in this sector is in less-perishable and relatively higher-unit value dairy produce and byproducts, such as cheese, butter, nonfat dry milk, casein, and whole milk powder.

Although the United States is a large-volume producer of dairy products, it generally has not accounted for a significant share of world trade in sector products.⁶ U.S. exports of dairy produce must compete with European Union (EU) exports that benefit from subsidies and with low cost exports from New Zealand and Australia.

A number of government programs influence the competitiveness of the U.S. dairy sector in world markets. The U.S. Government supports the price of milk through purchases of butter, nonfat dry milk, and cheddar cheese under the authority of the Agricultural Act of 1949. Four U.S. Government programs provide export incentives.⁷ Government purchase prices for the products have normally exceeded world prices.⁸ Many dairy processor and producer leaders agree that the price-support program impedes the ability of the sector to compete effectively in global markets.⁹ Moreover, since 1953, U.S. imports of almost all dairy produce made from cow's milk (except casein, caseinates, lactalbumin, and soft-ripened cheese) have been subject to quantitative restrictions (quotas) and licensing requirements under section 22 of the Agricultural Adjustment Act of 1933, as amended. The section 22 requirements were instituted to preclude adverse effects on domestic production, marketing and stocks, or the price support program.¹⁰

⁴ The Agreement on Agriculture is discussed in detail in ch. 3.

⁵ U.S. Department of Agriculture (USDA), Economic Research Service (ERS), *Dairy Background for 1990 Farm Legislation*, Mar. 1990, p. 48.

⁶ Between 1989 and 1993, the United States accounted for 2 percent or less of world trade in cheese; between 1 and 12 percent of nonfat dry milk; and between 10 and 20 percent of butter.

⁷ The four programs are the Dairy Export Program, Commodity Credit Corporation Direct Sales, Public Law 480 programs and section 416 donations.

⁸ General Accounting Office (GAO), *Dairy Industry Potential for and Barriers to Market Development*, Dec. 1993, pp. 44-46.

⁹ *Ibid.*, p. 42.

¹⁰ USDA, Foreign Agricultural Service (FAS), *Handbook on Section 22 Dairy Quotas and Import Licensing System*, Apr. 1988, p. 2.

Government programs in other countries also significantly impact their dairy production and trade. For example, the Common Agricultural Program (CAP) of the EU is generally recognized as having greatly restricted EU imports, contributed to internal surpluses, and fostered exports. According to a U.S. Department of Agriculture (USDA) report, international markets for dairy produce have been dominated by large quantities of subsidized EU exports.¹¹ In Canada, the dairy industry is a supply-managed system with virtually complete control of the milk available to the Canadian consumer, using production quotas, import restrictions, and financial assistance to exporters.¹²

Although milk is produced in each of the 50 States,¹³ production is concentrated in the Great Lake States¹⁴ (26 percent of production in 1992), the Pacific¹⁵ and Northeastern States¹⁶ (19 percent each), and the Corn Belt States¹⁷ (11 percent). There has been a long term shift in the share of production from the Midwest to the West and Southwest.¹⁷

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated tariff rate applied to U.S. under-quota imports of dairy produce in 1993 was 6.5 percent ad valorem.¹⁸ Under the URA, the average tariff is to be reduced to 6.4 percent ad valorem. The leading suppliers of U.S. imports of dairy produce are the EU and New Zealand.

Japan, the EU, and Canada¹⁹ are among the largest commercial GATT country markets²⁰ for U.S. dairy produce.²¹ The following tabulation shows certain foreign rates of duty and major concessions offered under the URA (percent ad valorem and specific rate as specified):

¹¹ USDA, ERS, *Dairy Background for 1990*, p. 48.

¹² USDA, FAS, *Dairy Annual Report* (CA3094), Nov. 19, 1993, pp. 11-12.

¹³ Michigan, Minnesota, and Wisconsin.

¹⁴ Alaska, California, Hawaii, Oregon, and Washington.

¹⁵ Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

¹⁶ Illinois, Indiana, Iowa, Missouri, and Ohio.

¹⁷ USDA, ERS, "Dairy Shifts to West & Southwest," *Agriculture Outlook*, Dec. 1993, p. 16.

¹⁸ No over-quota imports of dairy produce are permitted under current regulations.

¹⁹ Canada accounted for about 10 percent of the value of U.S. exports of dairy produce in 1993, but only about 1 percent of U.S. imports.

²⁰ Mexico is also an important U.S. market. However, Mexican imports benefit from U.S. Government export incentives.

²¹ USDA, FAS, *U.S. Dairy, Livestock, and Poultry Trade* (FDLP 12-93), Dec. 1993, pp. 26-28.

Country	Commodity	1993 rate of duty	URA offer
		Percent	
Japan	Certain ice cream	32.2	21.3
	Processed cheese	80.0	40.0
	Other cheese	35.0	22.0 or 26.0
	Whey	35.0 + 500 yen/kg ¹	29.8 + 450 yen/kg
EU	Certain ice cream	27.0 + 105 ECU/MT ²	17.8 + 69 ECU/MT
Canada	Certain fluid dairy products	17.5	7.53 ³
	Most types of cheese	7.72	3.32 ³
	Whey	7.72	3.32 ³
	Certain ice cream	15.5	6.67 ³

¹ Estimated by USITC staff to be 10 percent ad valorem

² Estimated by USITC staff to be 30 percent ad valorem

³ Rate applicable to in-quota quantities.

Other Provisions

The United States has agreed to replace its section 22 quotas with tariff-rate quotas.²² As a result of the Agreement on Agriculture, tariffs on imports in excess of the quota level are to be reduced by the minimally required amount (15 percent in equal annual installments over 6 years).

The tariff-rate quota for cheese in the first year of the agreement is to be 110,999 metric tons (slightly more than the quantity authorized entry under section 22 quotas in 1993);²³ the quota is to increase to 141,991 metric tons by the end of the phasing-in period (currently scheduled for 2000). New access will be allocated by country. The tariff-rate quota for dairy produce except cheese is to be increased by an estimated 66 percent over 1993 levels during the 6 year period²⁴ and will be allocated to existing section 22 categories that provide for specific products.

Dairy produce tariffs for imports in excess of quota and ad valorem equivalents for major products are:

- Nonfat dry milk—base tariff 101.80/1rilogram (kg) (estimated by U.S. International Trade Commission (USITC) staff to be about 50 percent ad valorem), to be reduced to 86.50/kg (35 percent);
- Butter—base tariff 181.30/kg (about 150 percent ad valorem), to be reduced to 154.10/kg (125 percent); and
- Cheese—base tariff 144.30/kg, to be reduced to 122.70/kg (unit values of cheese vary greatly, as would the ad valorem equivalents.)

²² It should be noted that the price support program for milk, which is operated under the Agricultural Act of 1949 and is unrelated to section 22 quotas, may not be directly affected by the URA.

²³ URA participants were granted flexibility in establishing base periods for commitments for import and export levels. Trade in the base period may differ significantly from trade in 1993.

²⁴ The tariff rate quota for dairy produce (except cheese) in the first year of the agreement is to be 13,700 metric tons of milk fat and 16,100 metric tons of nonfat solids. The tariff rate quota is to be increased to 22,785 and 26,825 metric tons, respectively.

The United States has also agreed to a ceiling on the quantity of U.S. Government-assisted exports and on budgetary outlays for all dairy products (not to exceed \$117 million annually by the last year of the agreement), except exports that meet URA standards for humanitarian relief. The Dairy Export Incentive Program (DEIP) will be the principal U.S. Government program affected; DEIP accounts for the great bulk of U.S. Government-assisted exports of dairy produce. In general, by the final year of the agreement, the quantity of assisted exports is to be reduced by 21 percent and budgetary outlays are to be reduced by 36 percent from a base period of 1986-90. The specific final-year commitments are as follows:²⁵

Product	Budgetary	
	Quantity limit (Metric tons)	outlay limit (\$1,000)
Nonfat dry milk	68,201	82,464
Butter/oil	21,097	30,497
Cheese	3,030	3,636
Other	34	21

Like the United States, the EU is to reduce both the quantity and budgetary outlays of dairy produce that benefit from EU export assistance. For example, the EU is to reduce its in-quota duty for cheddar cheese from 830 ECU/metric ton (US\$970) to 280 ECU (US\$328) and establish a 5,000-metric-ton quota for mozzarella cheese with a 130-ECU/metric ton (US\$150) in-quota rate. Other reductions are shown in table 6-2.

The URA also provide that a number of countries, including Japan, Korea, South Africa, Sweden, Costa Rica, and those of the European Free-Trade Association (EFTA)²⁶ increase market access for dairy produce. There is no indication that the dairy sector in the EU or any other country is subject to the provisions related to internal production subsidies in the Agreement on Agriculture.

²⁵ In 1993, total U.S. exports of nonfat dry milk were 142,000 metric tons; of butter, 160,000 metric tons; and of cheese, 17,000 metric tons.

²⁶ Austria, Finland, Iceland, Liechtenstein, Norway, Sweden, and Switzerland.

Table 6-2
Reductions in EU export assistance under the URA

Product	Quantity limit	Reduction from base		Export assistance limit
		Metric tons	Percent	
Butter	366,000	97,000	21	848
Nonfat dry milk	243,000	65,000	21	237
Cheese	305,000	122,000	29	281
Other dairy products	939,000	267,000	22	645

Source: U.S. Department of Agriculture.

Likely Impact on U.S. Trade

The URA are likely to result in a negligible net effect on trade, despite sizeable increases in both U.S. imports and exports of dairy produce. No change in U.S. trading partners is likely. There are likely to be increases in U.S. imports from New Zealand and Australia and in U.S. exports to Canada, Japan, and the EU. The likely increase in U.S. imports will result from the increase in access to the U.S. market as section 22 quotas are replaced with tariff rate quotas. Overall, there is likely to be a sizeable increase in U.S. imports, especially imports of cheese. The United States has agreed to increase market access for dairy products other than cheese by approximately 66 percent through annual increases in the tariff-rate quota quantity.

The likely increase in U.S. exports will result from increased market access and a reduction in subsidized exports from other suppliers, especially the EU. Overall, there is likely to be a sizeable increase in U.S. exports of certain cheese and dairy by-products. However, exports of fluid dairy products will continue to remain limited because of high perishability and transportation costs.

Likely Impact on U.S. Production, Employment, and Consumers

The URA likely will have a negligible effect on U.S. production and employment in the dairy produce sector because of offsetting effects of considerably increased U.S. imports and exports. Even at considerably increased levels, international trade will account for a relatively minor share of U.S. dairy production. The impact of the URA on consumers of dairy produce is likely to be small inasmuch as international trade will remain a minor share of the domestic market. Increased imports from GATT countries may increase the variety of available products, contributing to the small gain by U.S. consumers. The URA likely will have a negligible price effect on dairy produce.

U.S. Industry Positions on the URA

Trade and industry sources contacted by USITC staff had reservations about expressing their positions on the URA, inasmuch as they had not been able to review final offers. However, these sources supported the concept of more liberalized trade that is responsive to market forces rather than government intervention. In general, import interests contend that access to the U.S. market is still too limited.

The Dairy Agriculture Technical Advisory Committee (ATAC) contended²⁷ that the URA "...represents a positive but only partial step in the direction of establishing...a distortion-free environment for world dairy trade." The Committee also noted that on balance, the market access and export-subsidy reductions under the URA likely will open export market opportunities for the U.S. dairy industry in the long run. However, the URA will also present the industry with short-term adjustments, particularly adjustments to increased imports as well as limits on the use of export incentives.

The ATAC also stated that it is imperative that the United States ensure that Canada's final minimum access commitments in the dairy sector meet the required level of 5 percent of domestic consumption specified in the URA and that a schedule be established for bilateral commitments to accomplish a tariff phase-out for all dairy products. The ATAC noted that EU concessions concerning export subsidies and over-quota tariffs leave the United States with much lower levels of tariff protection and allow the U.S. industry lower levels of export assistance in the last year of the URA.²⁸ Therefore it will be critical to address this disparity in the continuation of negotiations.

²⁷ Report of the Agricultural Technical Advisory Committee (ATAC) on the Uruguay Round of Multilateral Trade Negotiations, Jan. 1994.

²⁸ The New Zealand Dairy Board, a cooperatively-structured organization representing the interest of New Zealand dairy farmers, maintains that new minimum access commitments under the URA will generally involve only moderate changes in actual practice. Edward J. Farrell of Bronz and Farrell, on behalf of the New Zealand Dairy Board, official submission to U.S. International Trade Commission (USITC), May 13, 1994.

CHAPTER 7

Fish¹

Table 7-1
Fish: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	345	328	312	-9.6
Trade data (million dollars):				
Shipments	6,300	6,450	6,580	4.4
U.S. exports:				
Total	3,080	3,395	2,998	-2.7
GATT ² signatories	2,996	3,303	2,895	-3.4
Other	84	92	103	22.6
U.S. imports:				
Total	5,635	5,654	5,806	3.0
GATT signatories	4,499	4,314	4,549	1.1
Other	1,136	1,340	1,257	10.7
U.S. trade balances:				
Total	-2,555	-2,259	-2,808	(³)
GATT signatories	-1,503	-1,011	-1,654	(³)
Other	-1,052	-1,248	-1,154	(³)
Consumption	8,855	8,709	9,388	6.0
Import market share (percent):				
Total	63.6	64.9	61.8	(³)
GATT signatories	50.8	49.5	48.5	(³)
Other	12.8	15.4	13.4	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will result in a negligible (1 percent or less) improvement in

¹ The following product groups are covered in the discussion of this industry sector: fresh or chilled fish; frozen fish; fish canned, cured, or otherwise prepared, and live fish; and shellfish. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to

the U.S. trade balance in the fish sector. U.S. duties for sector products are relatively low and most fish imports are complementary or supplementary to inadequate domestic supplies. The URA likely will result in a negligible increase in production and employment in the U.S. fish sector. The effect of the URA on U.S. consumers is expected to be negative but negligible because of slight price increases. Tariff reductions and dispute settlement measures under the URA likely will have the largest impacts on this sector.

²—Continued
reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

The United States was the sixth-leading world producer³ of fish in 1991, with a share of about 6 percent in terms of quantity, about the same as the European Union (EU). Other leading producers are China, Japan, the former Soviet Union, Peru, and Chile. A leading importer of fish products (14 percent of the total value of world imports in 1991), the United States trails only Japan (28 percent) and the EU as a group (37 percent). The United States is also the leading exporter of fish products, followed by Thailand, Denmark, Norway, and Canada. Domestic and global market shares vary considerably by industry.

The primary factor affecting the competitiveness of the U.S. fish industry is the availability of fishery resources within domestic waters.⁴ The U.S. industry historically has been relatively rich in such resources, with particularly large amounts of available groundfish,⁵ salmon, shrimp, and crabs. Technology is another factor affecting competitiveness. The U.S. industry is among the world's leaders in harvesting methods, vessel design, fishing gear, processing machinery, and marketing and distribution methods. The U.S. industry is at a relative disadvantage in terms of labor costs, particularly with respect to Asian competitors. Additionally, government regulation, mainly with respect to the management of fishery resources, has a significant impact on U.S. sector competitiveness; such regulations affect costs and supply availability.

Fishing and processing facilities are located along the coastal areas, with concentrations around traditional ports. The leading States in terms of value of landings in 1992 were Alaska, Louisiana, Massachusetts, Texas, and Maine. The leading industries include groundfish, salmon, shrimp, crabs, and tuna.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The U.S. ad valorem equivalent for fish products was approximately 0.7 percent based on 1993 imports. This duty ranged from .04 percent for fresh or chilled fish to 5.5 percent for canned, cured, or otherwise prepared and preserved fish. The highest U.S. duty is 35 percent for canned tuna in oil.⁶ U.S. fish duties are to be reduced by approximately 0.1 percentage point (15 percent) under the URA.⁷

³ In terms of live weight of catch.

⁴ Since the mid-1970s, most nations have established a 200-mile zone within which fishery resources are claimed.

⁵ Northwest Atlantic groundfish stocks (cod, haddock, pollock, hake, and flatfish) currently have been overfished and recently have been subject to harvesting limits.

⁶ This duty will not be reduced under the URA.

⁷ Based on ad valorem equivalent duties in 1993.

The following tabulation shows tariff ranges faced by U.S. exports of fish in major GATT-country markets:

Market	Tariff range (percent ad valorem)
Canada	0-17.5
Mexico	10-20
Japan	0-15
EU	0-30
Hong Kong	0 (bound under URA)

On average, foreign duties faced by U.S. fish exports are to decline by a relatively minor amount (about 1 percentage point) as a result of the URA. However, significant reductions for specific products will directly benefit U.S. fish exports. These reductions include tariff reductions on frozen, whole salmon (30 percent) and frozen crabs (33 percent) offered by Japan; tariff reductions on groundfish (up to 50 percent), dogfish (25 percent), and spiny lobsters (50 percent) offered by the EU; and the Hong Kong offer to bind duty-free status for fish imports.

Other Provisions

Other URA provisions likely will have limited direct impact on the fish sector. However, general provisions, such as changes in rules governing unfair trade practices and dispute settlement,⁸ may indirectly affect the sector.

Likely Impact on U.S. Trade

The overall impact of the URA on U.S. trade in the fish sector is expected to be positive but negligible, according to the Commission's sectoral model. U.S. exports likely will increase more than imports, as foreign duties generally will be subject to more significant reductions than U.S. duties.

U.S. imports of fish products likely will experience a negligible rise as a direct result of the URA. Such imports generally have been subject to relatively low duties, and sensitive, high-duty items (such as canned tuna in oil) generally were not included for duty

⁸ Canadian and Mexican duties will be reduced under the North American Free-Trade Agreement (NAFTA).

⁹ Understanding on Rules and Procedures Governing the Settlement of Disputes, Annex 2, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The rules and procedures in the Understanding apply to disputes brought pursuant to the consultation and dispute settlement rules and procedures of the 14 agreements relating to trade in goods (including the GATT 1994), the General Agreement on Trade in Services, the Agreement on Trade-Related Aspects of Intellectual Property Rights, and, as appropriate, the Plurilateral Trade Agreements in Annex 4, as well as consultations and the settlement of disputes concerning the rights and obligations under the provisions of the Agreement Establishing the World Trade Organization.

reductions. U.S. fish imports tend to complement products not produced domestically or to supplement products not produced in sufficient quantities to meet domestic demand. A significant portion of U.S. fish imports is utilized as raw material by domestic processors. Imports have accounted for about two-thirds of the U.S. fish market in recent years. Primary suppliers include Canada, Thailand, China, and Ecuador.

The URA are expected to have a negligible positive effect on U.S. fish exports. Improved market access, mainly through duty reductions, in traditional markets, such as Japan and the EU, probably will lead to a negligible rise in exports. However, the potential for these gains is constrained by available fish resources. Several domestic fish stocks currently are under duress,¹⁰ and future U.S. exports may be adversely affected by declines in supplies. Exports have accounted for about half of U.S. fish production in recent years. Major markets include Japan, the EU, and Canada.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, U.S. production and employment levels in the fish sector probably will experience a negligible increase as a result of the URA, as the expected rise in exports

¹⁰ Particularly Northeast groundfish stocks.

outpaces that in imports. This rise will benefit mainly coastal areas with fish harvesting and processing facilities. Disproportionate benefits, based on fishery stock location, production capacity, and the predominance of export products,¹¹ probably will accrue to the Alaska region. The URA are expected to have a negligible adverse effect on U.S. consumers of fish due to negligible price increases for domestic products as a result of increased exports. Minor reductions in existing low U.S. import duties probably will not lead to significant import supply increases.

U.S. Industry Positions on the URA

The U.S. fish sector is represented by the Industry Sector Advisory Committee on Consumer Goods (ISAC 4). ISAC 4 generally supports the progress of the URA toward free trade.¹² In general, representatives of the U.S. fish sector are disappointed that the original U.S. "zero-for-zero" offer was not achieved and believe that market access concessions by Japan are significant while those by the EU are minimal.¹³ Sector representatives note that other provisions of the URA, particularly those concerning dispute settlement, likely will be more beneficial than reductions in tariff provisions.

¹¹ Mainly salmon and crabs.

¹² *Report of the Industry Sector Advisory Committees (ISAC 4) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

¹³ Industry association official, U.S. International Trade Commission (USITC) staff telephone interviews, Mar. 28, 1994 and May 20, 1994.

CHAPTER 8

Sugar, Other Sweeteners, and Ethanol ¹

Table 8-1
Sugar, other sweeteners, and ethanol: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	71	71	71	0.0
Trade data (million dollars):				
Shipments	9,866	10,042	9,786	-0.8
U.S. exports:				
Total	441	339	340	-22.8
GATT ² signatories	404	304	322	-20.2
Other	37	35	18	-51.3
U.S. imports:				
Total	928	971	956	3.0
GATT signatories	856	864	837	-2.3
Other	72	107	119	65.4
U.S. trade balances:				
Total	-487	-632	-616	(³)
GATT signatories	-452	-560	-515	(³)
Other	-35	-72	-101	(³)
Consumption	10,353	10,674	10,402	0.5
Import market share (percent):				
Total	9.0	9.1	9.2	(³)
GATT signatories	8.3	8.1	8.0	(³)
Other	0.7	1.0	1.1	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis ² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will have a negligible effect (1 percent or less) on U.S. trade and production of the majority of products in the sugar, other sweetener, and ethanol sector because of

¹ The following product groups are covered in the discussion of this industry sector: sugar, other sweeteners, and ethanol. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on qualitative factors. The complexity of calculating foreign subsidy reduction and of

small duty reductions and the continuation of domestic support programs.³ Given these factors, the URA also

²—Continued

quantifying the reduction or elimination of agricultural quotas and tariff-rate-quotas precluded use of the Commission's sectoral model. For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

³ Due to on-going bilateral negotiations between the United States and Canada concerning the relationship of the URA to the United States-Canada Free-Trade Agreement (CFTA), and concerns about whether Canadian exports will be counted as part of the tariff rate quota, the negligible trade effect could not be characterized as positive or negative at this time.

will have a negligible effect on U.S. employment and domestic prices in this sector. Consumers are likely to be affected to a positive but negligible degree due to small price reductions. The Agreement on Agriculture is the most important URA for this sector.⁴

The United States has one of the most diverse sweetener markets in the world, producing and consuming a variety of caloric sweeteners, including refined sugar, starch-based (primarily corn) sweeteners, honey, and maple and other edible syrups. The United States also is a major producer and consumer of fuel ethanol, which is usually manufactured from the same basic feedstocks—corn or sugar—as are caloric sweeteners. In 1993, the United States was the fifth-largest producer of sugar, the dominant sweetener in world market, and accounted for approximately 6 percent of world production of 112 million metric tons, raw value.⁵ The United States is the largest world producer of corn sweeteners, accounting for nearly two-thirds of world production of approximately 10 million tons.⁶ Other caloric sweeteners, such as honey and maple and other syrups, make up less than 1 percent of U.S. domestic shipments of sweeteners, although the United States is also a major world producer of these products. The United States is the world's second-largest producer of ethanol behind Brazil. As a major consumer of these products, the United States is also a net importer of most caloric sweeteners and ethanol; in 1993, the United States had a negative sector trade balance of approximately \$616 million.

U.S. domestic production of sugar, the most commonly traded sweetener on the world market, has increased considerably over the past decade, encouraged by weak prices of alternative crops and the relative stability provided by the U.S. Department of Agriculture's loan program. Increased acreage and yields have been supplemented by expansion of sugar beet and sugarcane processing capacity and molasses "desugaring" technology, which have helped bring more domestic sugar to the U.S. market.⁷ The growth in domestic sugar production, coupled with the continued growth of the U.S. corn sweetener industry through new applications and improved technology, has contributed to decreasing U.S. imports of sugar over the past decade.

⁴ The Agreement on Agriculture is discussed in detail in ch. 3.

⁵ U.S. Department of Agriculture (USDA), Economic Research Service (ERS), *Sugar and Sweetener: Situation and Outlook Report*, Dec. 1993, p. 41.

⁶ USDA, ERS, U.S. International Trade Commission (USITC) staff telephone interview, Mar. 7, 1993.

⁷ In its pure form, sugar is a naturally occurring organic chemical known as sucrose, produced from either sugarcane or sugar beets.

Production of sugar beets in the United States is concentrated in the Great Lakes area,⁸ the Red River Valley,⁹ the Plains States,¹⁰ the Northwest States of Idaho and Oregon, and California. Sugarcane is produced in Florida, Louisiana, Hawaii, and Texas.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

Tariff reductions under the URA will affect only about one-third of total sector trade because approximately 45 percent of U.S. sector exports are to Canada and Mexico and 15 percent of imports are from Canada.¹¹ Another 15 percent of U.S. imports enter under preferential duty provisions, such as the Generalized System of Preferences (GSP) or the Caribbean Basin Economic Recovery Act (CBERA) program. Many of the remaining products have tariff-rate quotas or, in the case of ethanol, special legislative provisions.¹² The calculated U.S. duty reduction for this sector is less than 1 percentage point.

Imports of sugar into the United States have been limited by a tariff-rate quota system since 1990, under which an allocated amount of sugar is allowed to enter the United States, subject to the minimum duty of 0.625 cent per pound and any sugar imported in excess of the allocated amount has a second-tier duty of 16 cents per pound, raw value.

⁸ Ohio and Michigan.

⁹ Minnesota and North Dakota.

¹⁰ Colorado, Montana, Nebraska, northern Texas, and Wyoming.

¹¹ Tariffs will be reduced under the North American Free-Trade Agreement (NAFTA) for these products.

¹² Fuel use ethanol will continue to be subject to additional duties of 14.27 cents/liter as mandated by Congress and feedstock requirements will remain in effect for imports from Caribbean Basin Initiative (CBI)-beneficiary countries.

¹³ As of June 1, 1994, it is not known whether imports of sugar and sugar-containing products from Canada will be regulated by the tariff-rate quota system. Although Canada has been exempt from the tariff-rate quota's second-tier duty since Oct 1, 1990, under CFTA provisions, during the 1986-88 base period used during the Uruguay Round negotiations, imports from Canada were restricted by the U.S. quota on sugar and sugar-containing products. Sugar imports from Mexico may be counted as part of the U.S. tariff rate quota.

¹⁴ However, during the base period used to negotiate market access provisions for sugar (1986-88), the United States had a quota on sugar imports. Tariffication of the base period quota resulted in the United States binding tariff-rate import quotas at 1.117 million metric tons raw sugar and 22,000 metric tons refined sugar and setting the second tier duty at 17 cents per pound. These quota levels are less than projected import requirements.

Under the URA, the first-tier tariff on raw sugar will remain at 0.625 cent per pound, raw value.¹⁵ The existing first-tier tariff on refined sugar of 0.6625 cent per pound, refined basis, is to be raised under the URA to 1.6625 cents per pound to include the present section 22 fee of 1 cent per pound. The 17 cents per pound over-quota tariff rate is to be reduced to 16 cents per pound in 1995 and to 14.45 cents per pound by 2000. As with the first-tier duty on refined sugar, the section 22 import fee of 1 cent per pound also is to be added to a tariff of 18 cents per pound on refined sugar, with the total tariff of 19 cents per pound to be lowered 15 percent over 6 years.

U.S. exports of sugar are less than 5 percent of domestic production, including exports under the refined sugar re-export program.¹⁶ The U.S. sugar re-export program will be unaffected by the URA. In addition, approximately 60 percent of U.S. exports of sugar are to Canada and Mexico and are covered under the tariff provisions of the North American Free-Trade Agreement (NAFTA).

For sugar-containing products covered in this sector analysis,¹⁷ the United States has agreed to replace the current section 22 quotas with tariff-rate quotas that are set at present import levels.¹⁸ The in-quota tariff rates for these products are to remain unchanged at between 6 and 12.2 percent ad valorem. The over-quota tariff rates are to be based on the tariff equivalent for refined sugar and will be reduced by 15 percent over the next 6 years. Although Canada and Mexico are the leading U.S. export markets for sugar-containing products, other major GATT markets (Japan, the Philippines, and Thailand) have agreed to reduce their tariffs by an average of 30 percent for these products.

¹⁵ The United States allocates the first-tier imports of its tariff rate quota to those countries who historically supplied the U.S. market during a representative period (1975-81) that did not have a quota. While the United States did not bind these country-by-country allocations in the URA, officials at USDA, which administers the quota, indicate that the United States will continue allocation of the quota according to historical representation in the U.S. market.

¹⁶ The U.S. refined sugar re-export program allows eligible refiners to import quota-exempt raw sugar at world prices, refine the sugar, and then re-export the sugar to the world market. Exporters may tap a duty drawback, under which the Government returns nearly all of the duties paid to import the original product.

¹⁷ The sugar-containing products included in this sector analysis are those products contained in chapter 17 of the U.S. Harmonized Tariff Schedule (HTS).

¹⁸ These quotas will range from 1,500 metric tons for articles containing over 65 percent by dry weight of sugar and for blended syrups containing sugar, to 64,709 metric tons for articles containing over 10 percent by dry weight of sugar. These quotas also include products not in this sector. For articles containing over 65 percent by dry weight of sugars and blended syrups, Mexico is reserved an aggregate quantity of 1,500 metric tons of each quota. For articles containing over 10 percent by dry weight of sugars, Mexico is reserved 12,791 metric tons of the quota.

Of the major exporters of ethanol to the United States (Brazil, Jamaica, the United Kingdom, Costa Rica, El Salvador, and Argentina), Jamaica, Costa Rica, and El Salvador already export ethanol to the United States duty-free under the CBERA. The general ad valorem rate of duty for the other countries is 3 percent, which is to be reduced to 2.6 percent over the implementation period. U.S. exports of fuel ethanol are less than 6 percent of domestic shipments. The major U.S. markets are Brazil, the Netherlands, Mexico, and Germany. Under the URA, Brazil's ad valorem import duties on ethanol are to be cut approximately 60 percent, to 35 percent; and European Union (EU) ad valorem import duties are to decline 35 percent, to between 10 and 20 percent.

Other Provisions

One of the most important URA provisions likely to affect the world sugar and sweetener market is the reduction in subsidized exports by South Africa and the EU. By 2000, these countries have agreed to reduce subsidized exports of sugar by 200,000 and 340,000 tons, respectively. However, although EU production quotas are to be reduced in order to decrease subsidized sugar exports, sugar production is unlikely to decline as much as quota reductions because of the relative profitability of sugar beet production compared to alternative crops. Consequently, there likely will be less than a 2-percent reduction in exports from these countries.

Likely Impact on U.S. Trade

The effect of the URA on U.S. imports, exports, and net trade in this sector likely will be negligible but positive. The United States is a net importer of the products in this sector, but the calculated duty reduction is less than 1 percentage point and over-quota tariff rates for sugar will still be high at 14.5 cents per pound by the year 2000. The majority of trade in other sweeteners and sugar-containing products is with Canada and Mexico, which have agreed to reduce tariffs under the NAFTA. Starch-based sweeteners, which are usually derived from corn in the United States, are expected to be little affected by the URA because higher corn prices resulting from the URA are anticipated to be offset by increased prices for major by-products of corn sweetener production, such as corn oil and corn gluten feed.¹⁹

Likely Impact on U.S. Production, Employment, and Consumers

The overall impact of the URA on U.S. production and employment in this sector likely will be negligible

¹⁹ USDA, ERS, *Effects of the Uruguay Round Agreement on U.S. Agricultural Commodities*, Mar. 1994, p. 25.

due to the continuance of the tariff-rate quota and U.S. sugar price supports.²⁰ The levels of U.S. ethanol production and employment are expected to continue to be largely a function of U.S. domestic energy policy rather than trade policy. Consumers should not see any significant change in domestic prices.

U.S. Industry Positions on the URA

Sweetener industry officials are generally supportive of the URA, as stated by the Agricultural Technical Advisory Committee for Trade in Sweeteners (ATAC).²¹ They are, however, reluctant to

²⁰ The U.S. sugar price supports remain in effect because U.S. domestic commodity supports on average have already declined by the required 20 percent.

²¹ *Report of the Agriculture Technical Advisory Committee (ATAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

specify any effects that the URA may have on the U.S. sugar and sweetener industries. Representatives of these industries have expressed concern over ongoing bilateral negotiations with Canada concerning whether certain Canadian exports will be subject to allocation under the U.S. tariff-rate quota, considered part of the U.S. tariff-rate quota, or be in excess of the quota. There are similar concerns with respect to Mexican exports.

The Sweeteners Users Association, in a written statement to the Commission, indicated its support for the URA, but stated that it felt that the agreements should be only a beginning step toward opening the U.S. sweetener market further.²²

The major fuel-ethanol producing companies in the United States have not provided the Commission with any comments on the URA.

²² Thomas A. Hammer, President, Sweetener Users Association, official submission to USITC, May 2, 1994.

CHAPTER 9

Fruit and Vegetable Products¹

Table 9-1
Fruit and vegetable products: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	535	533	535	0.0
Trade data (million dollars):				
Shipments	24,035	24,426	25,000	4.0
U.S. exports:				
Total	4,383	4,699	4,937	12.6
GATT ² signatories	4,034	4,311	4,541	12.6
Other	349	388	396	13.5
U.S. imports:				
Total	4,982	5,091	5,166	3.7
GATT signatories	4,337	4,500	4,607	6.2
Other	644	591	559	-13.2
U.S. trade balance:				
Total	-599	-392	-229	(³)
GATT signatories	-304	-189	-66	(³)
Other	-295	-204	-163	(³)
Consumption	24,634	24,818	25,229	2.4
Import market share (percent):				
Total	20.2	20.5	20.5	(³)
GATT signatories	17.6	18.1	18.3	(³)
Other	2.6	2.4	2.2	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

Overall, the Uruguay Round Agreements (URA) likely will result in a modest positive increase (over

¹ The following product groups are covered in the discussion of this industry sector: fresh, chilled, or frozen vegetables; prepared or preserved vegetables, mushrooms, and olives; tropical fruit; citrus fruit; deciduous fruit; other fresh fruit; dried fruit; frozen fruit; and prepared or preserved fruit. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's

5 percent to 15 percent) in the net trade balance for the fruit and vegetable sector. The URA are expected to increase U.S. exports modestly as a result of foreign tariff reductions, improved procedures to resolve phytosanitary disputes, and reduced subsidized exports from other suppliers. Because most U.S. fruit and vegetable imports receive duty-free treatment or have low tariffs, increased imports as a result of the URA

²—Continued

sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

are expected to be negligible (1 percent or less). A negligible increase is also expected in production and employment, although certain industries may experience small increases in both. There are likely to be negligible positive effects for consumers due to increased availability of products, offsetting minor price increases for some products. The Agreements on Agriculture, Sanitary and Phytosanitary (SPS) Measures³ and Dispute Settlement are the most important URAs for this sector.

The United States is a major producer, importer, and exporter of fruit and vegetable products. The United States produces roughly 5 percent of world output and accounts for 20 percent of world trade in fruit and vegetable products.⁴

The largest volume of fresh fruit and vegetable trade takes place between nearby countries as a result of the perishability of the products. However, trade in fresh fruit and vegetables has become much more global in recent years because of new technologies that allow products to be shipped greater distances and arrive in good condition, and increased investment in fruit and vegetable production throughout the world. Nonetheless, climate still remains the most important factor in determining trade flows for fresh fruits and vegetables.⁵ Trade in canned, frozen, and dried fruits and vegetables has also increased in recent years, as a result of the elimination of many import licensing systems, reduced tariffs, and increasing incomes throughout the world.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The 1993 average calculated U.S. tariff for sector imports was 6.7 percent ad valorem equivalent. Under the URA, the United States has agreed to reduce this rate by 1.3 percentage points to 5.4 percent ad valorem equivalent. Certain fruit and vegetable products have higher-than-average import duties of up to 50 percent

³ The Agreements on Agriculture and Sanitary and Phytosanitary (SPS) Measures are discussed in detail in ch. 3.

⁴ Calculations based on data from Food and Agriculture Organization of the United Nations (FAO), *FAO Yearbook, Production, 1991*, (Rome, 1992); and FAO, *FAO Yearbook Trade, 1991*, (Rome, 1992).

⁵ For example, Southern Hemispheric countries, such as Chile, Argentina, South Africa, and New Zealand, export deciduous fruits to the United States, European Union (EU), and Japan during the winter months of the Northern Hemisphere, when there is little locally available fresh production. Similarly, vegetable producers in Mexico, Central, and South America target U.S. markets during the U.S. winter months, when U.S. production is low.

ad valorem equivalent.⁶ These higher rates are to be reduced by 2 to 7 percentage points, depending on the product.

U.S. sector exports will face reduced duties in many important markets. The European Union (EU) and Japan have agreed to reduce duties on sector imports by 3 to 15 percentage points, from the present levels of 5 to 60 percent ad valorem equivalent. Certain emerging markets for deciduous fruit, citrus fruit, and grapes, including Indonesia, Malaysia, and Thailand, offered significantly reduced tariffs, some as much as 40 percentage points lower than the base rate. In addition, Singapore has agreed to reduce tariffs from 27 to 10 percent ad valorem for most products exported by the United States. Korea and Latin American countries are expected to reduce tariffs approximately 20 percent. Nearly all major U.S. fruit and vegetable exports to Hong Kong are already duty-free.

Other Provisions

The export subsidy reduction commitments that are part of the Agreement on Agriculture likely will greatly assist export expansion for the U.S. industry. The United States has committed to end export subsidies for all fruit products by 2000; however, no Export Enhancement Program (EEP) funds were budgeted for fruit products for fiscal 1994, and no further EEP funds were anticipated.⁷ Only canned peaches and other canned fruit mixtures received export assistance under the EEP.⁸ The Market Promotion Program,⁹ which U.S. commodity groups have used to expand and open export markets, is not considered a trade distorting export subsidy and will be permissible under the URA.¹⁰

Several other countries also have agreed to reduce export subsidies for their fruit and vegetable products. South Africa and Turkey will be subject to the

⁶ The ad valorem tariff equivalent is 13 to 15 percent for processed mushrooms, 12 to 35 percent for canned fruit, 17.5 percent for many frozen vegetables, 50 percent for frozen concentrated orange juice, 35 percent for many juices, and 25 to 35 percent for dehydrated garlic and onions.

⁷ United States Department of Agriculture (USDA) official, U.S. International Trade Commission (USITC) staff telephone interview, Mar. 24, 1994.

⁸ According to industry and USDA sources, exports of canned peaches and mixed fruit received a limited amount of export assistance under the Export Enhancement Program (EEP) for a few limited markets in 1992 and 1993 as part of a settlement for EU violations of the U.S.-EC Canned Fruit Accord.

⁹ Public Law 101-624, the Food, Agriculture, Conservation, and Trade Act of 1990, authorized the Market Promotion Program to provide cost-sharing assistance in the form of cash or commodities to trade promotion organizations to help fund market development activities overseas, particularly in those markets where the United States encounters unfair trade practices by foreign competitors or importers.

¹⁰ Ambassador Michael Kantor, United States Trade Representative, testimony before the House Committee on Agriculture, Mar. 16, 1994.

minimum 36 percent reduction in the value of export subsidies; however, these subsidies were already low and not considered to have a major impact on world markets or prices. The EU has committed to reduce export subsidies by 36 percent in value and 21 percent in quantity from 1986 through 1990 base levels. Specifically, EU export subsidies for fresh fruit and vegetables will decline to 69 million ECU and 906,900 metric tons by the year 2000, from 1993 appropriations of 104 million ECU. The EU must reduce export subsidies of processed fruits and vegetables to 9.9 million ECU and 158,000 metric tons by the year 2000, from 1993 appropriations of 24 million ECU.¹¹ In addition, the EU has committed itself to specifying its system of reference prices for tariff purposes at a fixed level and putting a maximum on the levy that may be charged in addition to the ad valorem customs duty.¹²

Korea has committed to formalized market access for potatoes, onions, garlic, sweet potatoes, citrus fruits, juices, and dried, crushed, or ground peppers. Furthermore, Korea has agreed to liberalize restrictions on imports of fresh apples, grape juice, and beverages made of fruit juice in 1995, fresh grapes and apple juice in 1996, and orange juice in July 1997. Japan has committed to a minimum access agreement affecting most dry beans and peas for human consumption. However, the tariff-rate quota allows for only 120,000 metric tons to be imported at 10 percent ad valorem, which is close to current import levels.

The SPS agreement is of major importance to the fruit and vegetable products sector. The SPS agreement is expected to help protect the progress made through market access and tariff provisions by discouraging import restrictions based on unjustified SPS rules.

The Dispute Settlement Understanding¹³ is intended to ensure that disputes on the justification of SPS rules and other trade matters can be resolved in a timely manner. At present, disputes over subsidies, changes in market access, and SPS rules remain unresolved even after GATT rulings.

¹¹ 1993 EU expenditure levels based on 94/56/ECSC, EC, Euratom, "Final Adoption of the General Budget for the European Union for the Financial Year 1994."

¹² Historically, in addition to customs duties, the EU has protected certain fruit and vegetable industries by an administratively set internal price, called the reference price. If the entry price of the imported fruit or vegetable before customs charges was below the reference price, a charge was levied to match the difference between the reference price and the entry price.

¹³ Understanding on Rules and Procedures Governing the Settlement of Disputes, Annex 2, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The rules and procedures in the Understanding apply to disputes brought pursuant to the consultation and dispute settlement rules and procedures of the 14 agreements relating to trade in goods (including the GATT 1994), the General Agreement on Trade in Services, the Agreement on Trade-Related Aspects of Intellectual Property Rights, and, as appropriate, the Plurilateral Trade Agreements in Annex 4,

Likely Impact on U.S. Trade

U.S. trade in fruit and vegetable products is expected to increase modestly under the URA as a result of lowered tariffs, improved SPS dispute resolution procedures, and reduced competition from subsidized exports. According to the Commission's sectoral model, the quantity of U.S. exports is expected to rise modestly, while imports will increase negligibly, resulting in a modest positive increase in net trade. Most U.S. imports of fruit and vegetable products already receive more favorable tariff treatment than the negotiated URA tariff level, as a result of the North American Free Trade Agreement (NAFTA), the Caribbean Basin Economic Recovery Act (CBERA), the Generalized System of Preferences (GSP), and the Andean Trade Preference Act (ATPA), or low tariffs.¹⁴ Therefore, increased imports as a result of the URA are expected to be negligible.

Certain industries that historically have had duties higher than the overall sector average (including processed mushrooms; frozen asparagus, broccoli, and cauliflower; processed tomato products; and dried onions and garlic) will have U.S. duties lowered by 15 to 20 percent, likely resulting in a small increase in imports and a negligible negative effect on the trade balance in these industries. Lower duties, especially in Japan, the EU, and Southeast Asia, and market access provisions in Korea are expected to result in a small increase in U.S. exports of these processed vegetables, offsetting the increase in imports to some degree.

With farm yields and processing efficiencies for many of the preserved fruit and vegetable commodities increasing faster than domestic consumption in the United States, an expansion in exports is important to the future viability of certain industries. The leading export commodities expected to benefit from the URA in this sector include canned tomato products, frozen potato products, potato chips, frozen and canned corn, other frozen and canned vegetable products, frozen berries, raisins, prunes, and citrus and other fruit juices.

U.S. exports of many types of dried and fresh fruit likely will also increase modestly.¹⁵ As a result of lower tariffs and liberalized market access provisions in foreign markets, exports of fresh citrus from

¹³—Continued

as well as consultations and the settlement of disputes concerning the rights and obligations under the provisions of the Agreement Establishing the World Trade Organization.

¹⁴ The 1993 ad valorem equivalent for sector imports not already receiving special tariff treatment was 6.7 percent.

¹⁵ Recent plantings and improved production efficiencies in Florida are projected to make the United States a net exporter of orange juice by 1996 or 1997. However, lower tariffs in the EU and Japan will allow Brazilian exports currently entering the United States to be diverted to these and other markets, particularly in Asia, without significant negative impacts on U.S. grower prices.

California, Arizona, Texas, and Florida are expected to increase modestly overall and in particular to Japan, which is currently the leading market for fresh citrus exports. Exports of non-citrus fresh fruits are expected to increase modestly as a result of both reduced export subsidies by the EU, lower trade barriers, and improved SPS dispute resolution rules.¹⁶

With farm yields and processing efficiencies for many of the preserved fruit and vegetable commodities increasing faster than domestic consumption in the United States, an expansion in exports is important to the future viability of certain industries. The leading export commodities expected to benefit from the URA in this sector include canned tomato products, frozen potato products, potato chips, frozen and canned corn, other frozen and canned vegetable products, frozen berries, raisins, prunes, and citrus and other fruit juices.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, the effect on U.S. fruit and vegetable production and employment is expected to be positive but negligible. Although U.S. exports are expected to increase modestly, exports are equivalent to only 20 percent of domestic production. Certain regions and industries that are more export-dependent, such as the fresh pear, fresh sweet cherry, and fresh citrus fruit industries in the Western United States, are likely to see a greater positive effect on production and employment. Given the small increase in imports expected for even the

¹⁶ U.S. apple exports would increase modestly overall and recover ground in certain traditional markets, such as the Arabian Peninsula and the Scandinavian countries, as a result of a decline in EU export subsidies. Global shipments of U.S. pears would expand considerably as a result of reduced tariffs, especially in developing markets in Asia and Latin America. Smaller export gains are expected for cherry, table grape, peach, plum, and strawberry exports. Apples, pears, table grapes, cherries, peaches, plums, and strawberries already enter the United States either duty-free or at very low tariffs; therefore, only a negligible increase in imports is expected.

more import-sensitive industries, any negative production and employment effects are expected to be negligible for these industries.

The impact of the URA on U.S. consumers of these products is likely to be positive but negligible. Any increase in consumer prices as a result of increased U.S. exports of certain products likely will be mitigated by increased availability and variety of imported and domestic products.

U.S. Industry Positions on the URA

The Agricultural Technical Advisory Committee for Trade in Fruits and Vegetables (ATAC) supports the progress the URA made towards the reduction of trade distorting measures and barriers in the international movement of fruit and vegetable products.¹⁷ The ATAC is particularly pleased with the SPS agreement. However, the ATAC was disappointed that the URA do not go further to reduce tariffs, export subsidies, and internal supports.¹⁸ In addition, certain other industry groups expressed concern that changes to the "standing" requirements and the "de minimis" and "negligible" threshold requirements in the antidumping and subsidy agreements will weaken agricultural industries' ability to use such remedies in the future.

Many fresh fruit and vegetable organizations and industry officials concur with the ATAC, characterizing the SPS agreement as the most important part of the URA.¹⁹ They believe this agreement could be used to increase exports of fresh fruit and vegetables dramatically in terms of both volume and value.

¹⁷ California Cling Peach Advisory Board, official submission to USITC, May 2, 1994; American Dehydrated Onion and Garlic Association, official submission to USITC, May 2, 1994; and Florida Fruit and Vegetable Association, official submission to USITC, May 2, 1994.

¹⁸ *Report of the Agriculture Technical Advisory Committee (ATAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

¹⁹ Industry officials, USITC staff telephone interviews, Mar. and Apr. 1994; International Apple Institute, official submission to USITC, May 2, 1994; and Florida Fruit and Vegetable Association, official submission to USITC, May 2, 1994.

CHAPTER 10

Grain, Milled Grain, and Animal Feed

Table 10-1
Grain, milled grain, and animal feed: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	2,595	2,415	2,400	-7.5
Trade data (million dollars):				
Shipments	69,400	63,500	66,000	-4.9
U.S. exports:				
Total	13,788	15,288	14,788	7.3
GATT ² signatories	9,123	11,037	10,833	18.7
Other	4,665	4,251	3,956	-15.2
U.S. imports:				
Total	811	1,033	1,225	51.1
GATT signatories	800	1,020	1,214	51.7
Other	11	13	11	7.3
U.S. trade balance:				
Total	12,977	14,254	13,563	(³)
GATT signatories	8,323	10,017	9,619	-3 ¹
Other	4,654	4,237	3,944	-7.1
Consumption	56,423	49,246	52,437	-7.1
Import market share (percent):				
Total	1.4	2.1	2.3	(³)
GATT signatories	1.4	2.1	2.3	(³)
Other	(⁴)	(⁴)	(⁴)	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

⁴ Less than 0.05 percent.

Note.-Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) are expected to have a modest positive effect (over

¹ The following product groups are covered in the discussion of this industry sector: animal feeds; cereals; and milled grains, malts, and starches. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to

5 percent to 15 percent) on net trade for the grain, milled grain, and animal feed sector by encouraging U.S. exports. U.S. exports will benefit because the URA will establish new disciplines in the areas of market access, export and producer subsidies, and tariff reductions. The URA likely will have a negligible impact (1 percent or less) on U.S. imports, since U.S. trade barriers on sector products are already low

²-Continued

reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. I and app. E.

and the domestic industry is very competitive. It is expected that there will be small positive effects on sector production and employment; the URA may result in negligibly higher prices to U.S. consumers for sector products. The Agreement on Agriculture³ is the most important URA for this sector.

The United States is a large producer and exporter of grain, milled grain, and animal feed. In 1993, world trade in these products totalled about \$41 billion, of which the United States supplied about 37 percent (\$15 billion). U.S. exports of cereal grains were about \$16 billion; animal feeds, \$4 billion; and milled grains, about \$0.4 billion. Total annual world production of all grains is estimated at about 1,432 million metric tons (mint), of which the United States produces about 18 percent (258 mmt).⁴

Although the United States supplies a large share of world trade in sector products, it has lost global market share since 1988 through a decline in U.S. exports and increased exports by foreign competitors, such as the European Union (EU), Canada, China, Argentina, and South Africa. Export and production subsidies in these countries have made U.S. exports less competitive. Prior to its breakup, the Soviet Union imported a large percentage of U.S. grain exports, but the former Soviet Union countries now have less hard currency to purchase U.S. grain. In addition, several former markets for U.S. grain have become self-sufficient. For instance, China has become a major corn exporter, and Saudi Arabia has become a major exporter of wheat.⁵ Production and export subsidies play a crucial role in the competitiveness of suppliers, but weather conditions, such as the flooding in the U.S. Midwest in the summer of 1993, also play an important role. It is believed that U.S. growers are among the world's lowest cost producers, due to abundant high-quality farmland, labor efficiency, large farm size, and advanced farm equipment.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated tariff rate for U.S. sector imports from GAIT countries in 1993 was equivalent

³ The Agreement on Agriculture is discussed in detail in ch. 3.

⁴ In general, value-added grain products, such as milled grain and mixed feed, tend to make up a much smaller percentage of U.S. trade than does bulk grain, which tends to be easier and cheaper to ship and store longer. Wheat flour, for example, is more difficult to ship than wheat, because of the greater amount of dust, and because rancidity is a problem. Most foreign buyers have access to mills as well as mixing and packaging facilities and so are more likely to purchase grain and manufacture the derivative products domestically.

⁵ It is believed that Saudi Arabia exports about 2 million metric tons of high quality hard wheat, or about

to 3.6 percent ad valorem. The U.S. tariff offer is about 2.5 percent ad valorem equivalent, a reduction of 1.1 percentage points, or 31 percent. The largest U.S. duty reductions are to be in wheat, feed grains (particularly yellow corn, feed barley, and grain sorghum), and certain oilseed meals.⁶

Foreign tariff reductions include an offered reduction in Korean ad valorem tariffs on wheat, other than durum, from 3 to 1.8 percent and a reduction in the ad valorem tariff on wheat flour from 7 to 4.2 percent. Korea also agreed to reduce its tariff on soybean meal from 3 to 1.8 percent. Japanese ad valorem duties for most flours, as well as precooked, rolled, or flaked grains, are currently 25 percent; these tariffs are to decrease to 21.3 percent.⁷ The Japanese ad valorem duty on rye is to decline from 5 to 3 percent and the duty on oats is to decline from 10 to 8.3 percent. Mexico and Canada will have tariffs reduced under the North American Free-Trade Agreement (NAFTA).

Other Provisions

Section 22 quotas limit U.S. imports of certain animal feeds containing milk or milk derivatives to 7,400 metric tons, allocated to Ireland, the United Kingdom, New Zealand, and Australia. Under the URA, the United States has agreed to convert absolute quotas to a tariff-rate quota, with the quota limit (7,400 metric tons) and tariff rate (7.5 percent ad valorem) remaining the same as those previously applying. A tariff rate of 7.5 percent ad valorem plus 94.6 cents/cilogram (kg)⁸ is to apply to over-quota imports, which will be reduced to 6.4 percent ad valorem plus 80.4 cents/kg (or by 15 percent) over 6 years.

Japan has agreed to increase its current 5.5 mint import quota for wheat by 4 percent to 5.7 mint by the year 2000. Japan has also agreed to reduce its state-trading markup on wheat by 15 percent.⁹ Wheat entering under quota will be free of duty, except for meslin, which will be 20 percent ad valorem. The markup for wheat entering under quota is to be

⁵—Continued

\$300 million per year. The cost of growing the wheat is about \$1,000 per metric ton and the export value about \$150 per ton.

⁶ Some sector duties in base period and agreed percent reductions are:

Wheat (other than shown)	0.77 cent/kg	55%
Durum wheat	0.77 cent/kg	15%
Rice	0.69-3.3 cents/kg	36%
Feed grains	Free to 0.88 cent/kg	55-75%
Oilseed meals	0.26 to 0.7 cent/kg	20-55%

⁷ In the case of rye flour, 15 percent ad valorem.

⁸ The ad valorem equivalent of this specific tariff is about 100 percent.

⁹ Japan and Korea maintain markups on many agricultural commodities. Markups apply to in-quota product but not to over-quota product. The markups may change in value with the stated markup the maximum value. Markups tend not to affect trade for most products, since the cost of the markup is passed on to the consumer and since the quota is always filled.

53 yen/kg, falling to 45 yen/kg by 2000. Japan has agreed to lift its rice import ban by establishing an import quota of 379,000 metric tons in 1995, which will increase to 758,000 metric tons in 2000. In-quota rice will be free of duty, but will be subject to a markup of 292 yen/kg. In spite of the high markup, it is anticipated that U.S. exporters will be able to fill the quota.

Japan has agreed to increase its current 3.75 mint zero-duty quota for industrial-use corn by 450,000 tons, or 12 percent, by 2000. For barley, Japan has agreed to increase its current 1.318 mmt import quota by four percent, to 1.369 mint. All in-quota barley is to be imported duty-free, however, the markup on all barley will be 34 yen/kg, falling to 29 yen/kg over 6 years.

Korea has agreed to lift its rice import ban by establishing a quota of 50,000 tons in 1995,¹⁰ 100,000 tons in 1999, and 200,000 tons in 2004. Minimum access for coarse grains is to be granted by Korea, as well as a number of other countries, such as Sweden, Finland, South Africa, and the Philippines, that would amount to about 500,000 tons of new market access annually. Korea will establish minimum access for feed barley of 14,150 metric tons, to be increased by 67 percent to 23,582 metric tons, and the in-quota tariff for feed barley will be 20 percent ad valorem.

The EU has committed to maintaining current access opportunities in the form of a minimum purchase requirement of 2 million metric tons of corn and 300,000 tons of sorghum from non-EU suppliers. The EU will convert its variable levels on wheat, rye, rice, barley, oats, corn, soybean, and milled grain products to specific tariffs and reduce these tariffs by 36 percent by 2000. In the event the EU reduces support prices for these products, it has committed to maintain the relationship between the duty-paid import price and the support price.

For corn gluten imports, the EU has agreed to a side letter confirming its willingness to implement the previous Memorandum of Understanding that was part of the Blair House Accord. This memorandum defines corn gluten feed, which enters the EU duty-free, in terms of starch, fat, and protein content. The URA language states that if U.S. exports of non-grain feed ingredients to the EU are greater than the 1990-92 average, both parties agreed to consult with the view of finding a mutually acceptable solution.

U.S. export subsidies for many grains, especially wheat but also feed grains and rice, are to be reduced under the URA. Export subsidies for U.S. wheat are to be reduced from 22.360 mint in fiscal year 1993, to 14.522 mmt in 2000, and budgetary outlays for export subsidies would be cut from \$853 million in fiscal year 1993 to \$364 million in 2000. Export subsidies for rice are to be reduced from 278 thousand metric tons in

¹⁰ This quota represents one percent of base period consumption (1986-88 average) in 1995, increasing to two percent of base period consumption in 1999, and four percent by 2004.

1993 to 38,544 tons in 2000.¹¹ The corresponding value of the rice export subsidy is to be reduced from \$13 million in fiscal year 1993 to \$2.4 million in 2000.¹² Exports subsidies for U.S. coarse grains, including barley, sorghum, malt, and other mixed feeds, which amounted to 1.336 mmt and \$48 million in fiscal year 1993, must be under ceilings of 1,561 mmt and \$46.118 million, respectively, in 2000.

The EU's **maximum** allowable quantity of subsidized wheat and wheat flour exports is to be reduced from 22.2 mint in 1992/93 to a level no higher than 13.4 mint by the year 2000. For coarse grains, the EU's quantity of subsidized exports must be reduced from an average of 12.199 mmt in 1991 and 1992 to a maximum allowable 9.973 mmt.¹⁴ The maximum allowable budgetary expenditure for sector export subsidies must be reduced from approximately \$3.4 billion in 1993 to \$2.3 billion by 2000.

Major rice-producing countries in Asia have agreed not to increase producer subsidies for rice under the URA provisions. South Africa has agreed to bind a low duty for a substantial tariff-rate quota for corn gluten feed, essentially liberalizing their market. The EU has committed under the URA to maintaining current access opportunities for corn gluten feed and other non-grain feed ingredients.

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the URA are likely to have a modest positive impact on net U.S. trade in grain, milled grain, and animal feed products. U.S. import changes will be negligible because of the relatively low U.S. tariffs and quotas currently in place. U.S. exports are likely to increase by a modest amount (over 5 percent to 15 percent) due to reductions in tariffs and nontariff barriers (NTBs) for sector exports. Additionally, the reductions in U.S. export subsidies are expected to be offset by larger reductions in EU export subsidies. The URA will serve to open new rice markets in Japan and Korea, although by small amounts, and increase access in Japan for corn for industrial use. The URA will also guarantee access of feed grains into the EU¹⁵ by making the Enlargement Agreement permanent.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, the URA likely will have a small positive impact overall

¹¹ Official U.S. Offers List under the Subsidy Code, Budgetary Outlay and Quantity Reduction Commitments, table 11, Dec. 15, 1993.

¹² Ibid.

¹³ Ibid.

¹⁴ Coarse grains export subsidy reductions will start from the 1986-90 base.

¹⁵ The Enlargement Agreement grants the United States access to 2 million metric tons of corn and 300,000 metric tons of sorghum in the Spanish market and maintains the Portuguese corn quota at 500,000 metric tons.

on U.S. production and employment. This is because exports, while large, are not as large as domestic consumption, which is not expected to be affected by URA. The domestic rice industry, which exports a larger portion of production than other grain industries, could see a larger, though still small increase in production and employment from the increased access for rice negotiated under the URA. Consumers may face negligibly higher prices for sector products as production expands to meet the increase in export demand.¹⁶

U.S. Industry Positions on the URA

Trade and industry officials generally support the URA, but with some reservations.¹⁷ These officials are waiting to see final offers before submitting formal position papers. The Agricultural Technical Advisory Committee (ATAC) for Trade in Grain and Feed strongly supports the goals of the URA, particularly the goal of "arresting the growth in export subsidies." A major objection of the ATAC to the URA is that it allows the EU to aggregate tariff line items when reducing export subsidies, thus allowing the EU to pick

¹⁶ Higher prices are expected to encourage more resources to be invested in sector production to meet export demand.

¹⁷ *Report of the Agriculture Technical Advisory Committee (ATAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1993.

and choose items to which reductions will be applied. The ATAC predicts that the URA will increase access to the Japanese market for corn for industrial use, benefitting the U.S. corn industry. Other industry officials also support the URA.¹⁸

The National Corn Growers Association sees the URA as a significant step in the right direction, but was disappointed that the reductions in export subsidies were "backloaded" in the 6-year phase-in period.¹⁹ The Rice Millers Association supports the rice provisions of the URA but is concerned that U.S. rice exporters will not be able to take full advantage of the Export Enhancement Program (EEP) provisions as allowed under the URA if EEP funding is cut in the U.S. Federal budget. The U.S. Feed Grains Council sees the URA as a step forward, particularly on the issue of export subsidies, but views it as less favorable to U.S. corn exporters than the Blair House Agreement, which likely would have opened world markets for U.S. corn to a somewhat greater extent. The U.S. Feed Grains Council has expressed its concern that the URA allows too much aggregation of tariff items in the EU's export subsidy allocation for coarse grains.²⁰

¹⁸ Officials from The Miller's Federation, U.S. Feed Grains Council, Rice Millers Association, and U.S. Wheat Associates, U.S. International Trade Commission (USITC) staff telephone interviews, Mar. 30-31 and Apr. 4, 1994. See also, written submissions by these associations.

¹⁹ Pete Wenstrand, President, National Corn Growers Association, statement on the tentative GATT Agreement on Agriculture, *ATAC Report*, Jan. 1993.

²⁰ Ibid.

CHAPTER 11

Oilseed and Oilseed Products¹

Table 11-1
Oilseed and oilseed products: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	555	546	536	-3.4
Trade data (million dollars):				
Shipments	17,800	17,400	17,400	-2.2
U.S. exports:				
Total	6,314	7,191	7,436	17.8
GATT ² signatories	5,416	6,211	6,485	19.7
Other	898	979	951	6.0
U.S. imports:				
Total	1,279	1,549	1,471	15.0
GATT signatories	1,259	1,523	1,432	13.7
Other	20	25	39	95.0
U.S. trade balance:				
Total	5,034	5,642	5,965	(³)
GATT signatories	4,157	4,688	5,052	(³)
Other	877	954	913	(³)
Consumption	12,766	11,758	11,435	-10.4
Import market share (percent):				
Total	10.0	13.2	12.9	(³)
GATT signatories	9.9	13.0	12.5	(³)
Other	0.2	0.2	0.3	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) are expected to have a negative but negligible effect

¹ The following product groups are covered in the discussion of this industry sector: edible nuts, oilseeds, and animal or vegetable fats and oils. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely

(1 percent or less) on net trade in the oilseed sector, led by decreases in U.S. exports of vegetable oil. The effect on U.S. production and employment is likely to be negative but negligible. Due to price declines and greater availability of products, there may be small gains (over 1 percent to 5 percent) for U.S. consumers. In addition to tariff reductions, the Agreement on

²—Continued

impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

Agriculture's³ provisions on converting quotas to tariffs and reducing export subsidies will significantly affect products in this sector.

The United States is the leading world exporter and producer of oilseeds, fats, and oils. In 1992 and 1993, the United States accounted for 30 percent of world oilseed production (totaling 227 million metric tons (mmt)), and 58 percent of world exports (38 mmt). With regard to vegetable oil, the United States supplied 7 percent of world output (totaling 61 mmt), and 5 percent of world exports (totaling 21 mmt) of vegetable oil. The United States is the leading world exporter of animal fats, tallow, and greases, supplying about 50 percent of world production and world exports in 1992/93.

World trade in oilseeds is relatively unrestricted, with tariffs and nontariff barriers (NTBs) playing only a minor role in the trade. Two exceptions are the European Union (EU) internal production subsidies on grain and oilseeds and general protection for edible nuts (including peanuts).⁴ With regard to world trade in fats and oils, however, many countries protect their domestic processing industries through tariffs, differential export taxes, and other NTBs.

The U.S. competitive position in oilseeds and oilseed products has worsened in recent years because of strong competition from Brazil, Argentina, Malaysia, and the EU. The EU agricultural policies on grain and oilseeds have greatly influenced world demand, exports, and trading patterns of oilseed products. In the mid to late 1980's, the United States introduced an export subsidy program for U.S. vegetable oil exports in order to combat EU trade policies in third-country markets.

The world market for oilseeds and oilseed products is concentrated mainly in the EU, in the Pacific Rim countries, and, to a lesser degree, in the former Soviet Union countries. In recent years, about three-quarters of U.S. vegetable oil exports have received export assistance in order to be competitive in world markets.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

U.S. tariffs and nontariff measures are relatively low for this sector, except for peanuts and edible nuts.⁵

³ The Agreement on Agriculture is discussed in detail in ch. 3.

⁴ Domestic edible nut producers tend to be more protected, as evidenced by India's system of import licensing for peanuts and the European Union's (EU) tariff on almonds.

⁵ Some foreign NTBs on vegetable oil include state trading and import licensing.

⁶ Imports of certain edible mixtures of fats and oils in U.S. Harmonized Tariff Schedule (HTS) subheading 1517.90 containing dairy products (butter and butter oil) are also restricted, but their trade is minor.

The URA are expected to reduce U.S. duties on imports by about 0.6 percentage point (excluding Mexico and Canada).⁷ U.S. sector imports in 1993 came mainly from Canada, the EU, the Philippines, India, Brazil, and Malaysia, which together supplied 75 percent of the \$1.5 billion in U.S. imports.

Most U.S. sector exports are sold in other GATT member countries, although about 8 percent of 1993 U.S. exports went to the former Soviet Union, Taiwan, and China. The EU and Japan together purchased nearly half of the \$7.4 billion in U.S. exports in 1993. Other leading markets for these U.S. products were Mexico and Canada (together purchasing 14 percent of 1993 U.S. exports), Korea (4 percent), and India (1 percent).

The foreign tariff reductions in the leading U.S. markets for these products under the URA are expected to average 1 percentage point or less, with the most important reductions for U.S. almonds. The EU, the leading world market for edible nuts, has agreed to reduce duties on U.S. roasted almonds from 14 to 9 percent ad valorem. Korea agreed to reduce duties on vegetable oil, with soybean oil tariffs falling from 9 to 5 percent, and sunflowerseed oil tariffs from 25 to 18 percent. Although Japan agreed to tariff reductions on vegetable oil imports, remaining duties on vegetable oil are considered to be prohibitive (for example, a 26-percent duty on soybean oil). India, one of the largest markets for vegetable oil in the world, offered little or no tariff concessions, and its oilseed sector remains largely insulated through its restrictive import policies.

The U.S. proposal in the Uruguay Round negotiations to eliminate all tariffs and export subsidies on oilseeds and products was rejected. Thus, a dramatic decline in foreign tariffs and NTBs on oilseeds and products will not occur under the URA.

Other Provisions

The section 22 quota of 775 metric tons of peanuts will be replaced under the URA with a tariff-rate quota of 56,283 metric tons of peanuts (for shelled, unshelled, or otherwise prepared or preserved peanuts),⁸ and a quota of 20,000 metric tons for peanut butter.⁹ U.S. imports of peanuts and peanut butter above the quota amounts will be dutiable at what are likely to be

⁷ U.S. imports from Mexico and Canada will have duties reduced under provisions of the North America Free-Trade Agreement (NAFTA).

⁸ India uses import licensing and state trading to restrict its imports of oilseeds and products. See, for example, U.S. Department of Agriculture (USDA), Foreign Agricultural Service (FAS), *Trade Policies and Market Opportunities for U.S. Farm Exports*, various years.

⁹ The quota for shelled, unshelled, and prepared peanuts by the year 2000 will be 56,283 metric tons of peanuts (shelled equivalent) for peanuts and peanut products entered under HTS subheadings 1202.10.40, 1202.20.40, 2008.11.25, and 2008.11.45. The quota for peanut butter and paste will be 20,000 metric tons for HTS subheading 2008.11.05.

prohibitively high rates (132 percent for peanut butter, prepared peanuts, and shelled peanuts; and 164 percent for in-shell peanuts).

Under the URA, U.S. exports of vegetable oil under U.S. export programs¹⁰ must be reduced to no more than 141,000 tons within 6 years. Thus, the URA will require a reduction in U.S. vegetable oil exports under these programs of about 550,000 tons, or 80 percent below the 690,000 tons exported in 1993. There were few if any significant reductions in foreign market barriers to U.S. oilseeds and oilseed products, except in the case of the EU.

The Blair House Agreement may provide direct additional U.S. market access in the EU for soybeans, and indirectly improve access for vegetable oil.¹¹

Likely Impact on U.S. Trade

The URA are expected to have a negative, but negligible effect on the sector's net trade, as U.S. exports decline and U.S. imports rise. Overall U.S. imports of sector products under the URA are likely to experience a small increase (over 1 percent to 5 percent), according to the Commission's sectoral model.¹² Most of the expected increase will be in imports of peanuts and peanut butter, which are likely to come from Argentina.¹³ Increased peanut imports could reduce U.S. prices, and possibly affect the U.S. Department of Agriculture's (USDA) price-support program for peanuts.

As a result of the URA, overall U.S. exports of oilseeds and products are likely to decline by a negligible amount because of lower U.S. export subsidies and relatively little additional foreign market access. U.S. exports of fats and oils are likely to experience a small decline led by sharply lower U.S. vegetable oil exports, induced by lower U.S. export

¹⁰ The USDA export assistance programs for vegetable oil are the Export Enhancement Program (EEP), the Sunflowerseed Oil Assistance Program (SOAP), and the Cottonseed Oil Assistance Program (COAP).

¹¹ The Blair House Agreement likely will reduce internal European Union (EU) production subsidies for oilseeds and vegetable oil, and indirectly reduce EU vegetable oil exports. See USDA, Economic Research Service (ERS), *Oil Crops*, Jan. 1994, pp. 18-22.

¹² Imports from Canada and Mexico were excluded from consideration because duties will be reduced under NAFTA. For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

¹³ Argentina is to be allotted 78 percent of the quota amount for peanuts and prepared peanuts for the tariff rate quota; Mexico, 6 percent; and other countries (chiefly China), the remaining 16 percent. Of the 20,000-ton quota on peanut butter, Canada has a 72-percent share; Argentina, 19 percent; GSP-eligible countries, 8 percent; and other countries, 1 percent.

subsidies. Without Government assistance,¹⁴ U.S. vegetable oils currently are not competitive in world markets.¹⁵

If, as a result of lower internal EU production subsidies, EU exports of vegetable oil are reduced and world prices of vegetable oil rise, the United States may be able to capture some of the current EU market share, and retain some of its own current markets. Although lower EU export subsidies for vegetable oil may mitigate the expected decline in U.S. vegetable oil exports, some decline is still likely. U.S. exporters of sunflowerseed and cottonseed oil sell in foreign markets with specialized demand for these two vegetable oils, and may be able to retain some of their current markets, if no longer challenged with EU rapeseed oil.

However, U.S. exporters of soybean oil are not likely to compete as successfully with lower-priced Argentine and Brazilian soybean oil and Malaysian palm oil, which together may capture a sizeable amount of the expected 0.5-million-ton drop in U.S. exports, and the 0.6-million-ton drop in EU vegetable oil exports.¹⁶

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission sectoral model, overall U.S. production and employment levels for the sector likely will decline negligibly. The impact of the URA on U.S. consumers of these products is likely to be small, owing to a small decrease in the price of U.S. and imported products, particularly peanuts and vegetable oil. Increased imports may increase the variety of available products, contributing to the small gain by U.S. consumers.

The two industries likely to experience a negative effect of the URA are U.S. vegetable oil producers, and U.S. peanut growers. U.S. vegetable oil producers are likely to experience a small decline in production and

¹⁴ USITC staff estimate that the average EEP subsidy for U.S. soybean, cottonseed, and sunflowerseed oil amounted to 23 percent of the market price in fiscal year (FY) 1993. Since a number of other fats and oils do not currently receive an EEP bonus (such as tallow and greases), the U.S. subsidy for all fats and oils amounted to about 7 percent of the \$1.4 billion in U.S. exports of all fats and oils in 1993.

¹⁵ For example, during 1992/93, the price of U.S. soybean oil (Decatur) of \$472 per metric ton was 12 percent higher than the price of Brazilian soybean oil, 16 percent above Argentine soybean oil, 24 percent above Malaysian palm oil, and 7 percent above EU rapeseed oil, according to USDA data.

¹⁶ A potential drop in net EU vegetable oil exports (as a result of the reduced, EU internal production subsidies) of 400,000 to 800,000 metric tons has been estimated. USDA, ERS, "U.S.-EU Oilseed Agreement and CAP Reform," *Oil Crops*, Jan. 1994.

employment due to reduced exports. A small increase in U.S. imports of edible nuts (nearly all peanuts) and peanut butter may result in a small decline in U.S. peanut production and employment. U.S. peanut production is concentrated in the U.S. Southeast, and U.S. vegetable oil crushers are located mainly in the U.S. Midwest.

U.S. Industry Positions on the URA

The Agricultural Technical Advisory Committee (ATAC) on Oilseeds and Products found the URA to be only minimally beneficial to this sector because the URA does not compel Argentina or Brazil to reduce their export subsidies nor the EU to reduce its internal subsidies on oilseeds. In contrast, the United States will be required to reduce the volume of its Export Enhancement Program (EEP) vegetable oil exports by 80 percent. The ATAC also indicated that the elimination of section 22 protection for the U.S. peanut industry will result in significant new access to the U.S. market, while other countries' actions will not result in significant new market access for U.S. peanuts.¹⁷

A number of representatives of oilseed sector trade associations provided views to Commission staff on the URA.¹⁸ A representative of the National Peanut Council of America indicated that the loss of the section 22 quotas on peanuts is likely to result in domestic price declines and sizeable losses for the USDA price-support program for peanuts. The American Peanut Shellers Association, a trade association representing most U.S. shellers of peanuts, indicated that the URA will negatively impact the peanut shelling industry, since more U.S. imports of shelled peanuts and peanut butter will be allowed. The association estimated that the U.S. peanut industry will

¹⁷ *Report of the Agricultural Technical Advisory Committee (ATAC) on Oilseeds and Products on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994, p. 1.

¹⁸ Officials from the oilseed and oilseed products industries indicated their general agreement with the ATAC position. USITC staff telephone interviews, Mar.-Apr. 1994.

be reduced in size by about 10 percent as a result of the higher imports. However, if the current USDA support program for peanuts were made more market responsive, the association indicated that the URA might actually have an indirect positive effect on the U.S. shelling industry.¹⁹

A representative of the National Oilseed Processors Association (NOPA) indicated that there is likely to be little overall effect on total U.S. imports and exports of all oilseeds and oilseed products, but U.S. vegetable oil exports would likely be negatively affected, since the reduction of EEP export subsidies would require an 80-percent reduction in U.S. exports. The association representative also indicated that, in the long run, secondary effects of the URA may tend to boost world income in foreign markets, and thus boost U.S. exports of meat and poultry that use oilseed meals, benefitting the U.S. oilseed industry.

A representative of the National Sunflowerseed Association said that the URA provisions pertaining to the EU, in contrast to the Blair House Agreement, were disappointing, as foreign tariffs and NTBs were reduced very little under the URA.²¹ In the short term, the restrictions on U.S. export subsidies are likely to reduce U.S. exports of vegetable oil to most world markets, but U.S. sunflowerseed oil exporters are looking to niche markets, such as Mexico, for better opportunities. A representative of the American Soybean Association indicated that the URA likely would not benefit the U.S. soybean industry, because the U.S. industry lost its export subsidies while competitors, such as the EU, Argentina, and Brazil, retained theirs.²²

¹⁹ American Peanut Shellers Association, official submission to USITC, May 2, 1994.

²⁰ Representative of the National Oilseed Processors Association, USITC staff telephone conversation, Mar. 17, 1994.

²¹ Representative of the National Sunflowerseed Association, USITC staff telephone interview, Mar. 23, 1994.

²² Representative of the American Soybean Association, USITC staff telephone conversation, Mar. 31, 1994.

CHAPTER 12

Beverages¹

Table 12-1
Beverages: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	165	163	163	-1.2
Trade data (million dollars):				
Shipments	52,137	54,265	57,574	10.4
U.S. exports:				
Total	748	904	943	26.1
GATT ² signatories	671	795	821	22.4
Other	77	108	122	58.4
U.S. imports:				
Total	3,279	3,750	3,633	10.8
GATT signatories	3,238	3,708	3,589	10.8
Other	41	42	44	7.3
U.S. trade balance:				
Total	-2,531	-2,846	-2,689	(³)
GATT signatories	-2,567	-2,913	-2,767	(³)
Other	36	66	78	(³)
Consumption	54,667	57,112	60,264	10.2
Import market share (percent):				
Total	6.0	6.6	6.0	(³)
GATT signatories	5.9	6.5	6.0	(³)
Other	0.1	0.1	0.1	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

As a result of the Uruguay Round Agreements (URA), the U.S. trade deficit in the beverage sector

¹ The following product groups are covered in the discussion of this industry sector: nonalcoholic beverages, excluding fruit and vegetable juices; malt beverages, wine, and certain other fermented beverages; and distilled spirits. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely

likely will improve by a small amount (over 1 percent to 5 percent) as U.S. beverage imports experience small growth,³ and U.S. beverage exports to the GATT market grow sizeably (over 15 percent). Although export growth likely will precipitate only a

²—Continued
impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

³ U.S. imports from non-GATT-countries, as well as GATT-countries, will experience growth due to the extension of U.S. tariff reductions to imports from non-GATT countries with most-favored-nation (MFN) status.

negligible change (1 percent or less) in U.S. beverage production and employment, the categories of greatest export growth—wine and distilled spirits—will experience small increases in both production and employment. The impact on U.S. consumers likely will be positive but negligible due to slightly lower prices. In addition to the Agreement on Agriculture, agreements on trade-related intellectual property rights (TRIPs), dispute settlement,⁴ and sanitary and phytosanitary (SPS) measures⁵ will significantly impact this sector.

Although the U.S. beverage sector is highly competitive in the United States, where it maintains a 94 percent share of the domestic market, it is less competitive abroad. The U.S. sector produces about 12 percent of the world's beverage supply,⁶ and exports less than 2 percent of its overall production. The primary reason for the low level of sector exports is the high relative cost of transporting nonalcoholic beverages (namely soft drinks) and beer, due to their low unit values and considerable weight. Although nonalcoholic beverages and beer represent 87 percent of total U.S. beverage production, these categories represent less than one-half of U.S. beverage exports.⁶ Another reason for the low level of beverage exports is the ability of most countries to produce and bottle their own beer and soft drinks, irrespective of their level of development.

Although breweries and nonalcoholic beverage manufacturing plants are distributed widely throughout the United States so as to be in close proximity to consumers, the areas of greatest concentration are California, Texas, Colorado, and Wisconsin. Wineries and distilleries are concentrated predominantly in California, New York, Kentucky, and Washington.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions⁷

Although current U.S. beverage tariffs range from free to the equivalent of about 73 percent ad valorem,

⁴ The Agreements on Agriculture and Sanitary and Phytosanitary Measures are discussed in detail in ch. 3.

⁵ Data estimated by U.S. International Trade Commission (USITC) staff.

⁶ Production, trade, and market share figures derived from official data of the U.S. Department of Commerce and the Bureau of Alcohol, Tobacco, and Firearms, U.S. Department of the Treasury.

⁷ The figures presented in this section are based on U.S. trade with all partner countries except Canada and Mexico, since U.S., Canadian, and Mexican beverage tariffs are being reduced or eliminated under the North American Free-Trade Agreement (NAFTA). In 1993 U.S. beverage trade with Canada and Mexico accounted for 24 percent of total beverage imports, and 24 percent of total beverage exports. For more information, see USITC, *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

the average trade-weighted U.S. tariff rate on beverages was equivalent to about 2.9 percent ad valorem in 1993. The current range of foreign ad valorem equivalent tariffs applied to U.S. beverage exports in the largest GATT markets is free to 316 percent for Japan, free to 96 percent for the European Union (EU), and free to 37 percent for Australia.⁸

Under the URA, the United States has agreed to lower its average ad valorem equivalent tariff rate on beverages by about 1.4 percentage points.⁹ The average foreign ad valorem equivalent tariff reduction is to be about 7 percentage points.¹⁰ The United States, Japan, the EU, and Australia have agreed to eliminate tariffs on brown distilled spirits and beer under a zero-for-zero initiative.

Other Provisions

One of the most important agreements affecting market access for the beverage sector is the SPS agreement. The agreement is expected to result in a reduction in nontariff barriers (NTBs), such as those restricting U.S. wine exports to the EU due to EU restrictions on certain U.S. wine production processes.

Other URA provisions that likely will benefit the domestic distilled spirits and wine industries are those on TRIPs¹¹ and dispute settlement.¹² Under the TRIPs

⁸ Foreign tariff rates from Country Schedules, Agreement on Agriculture, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The Japanese tariff rate actually applied to U.S. beverage exports (especially exports of wine and distilled spirits) is often 10 to 50 percent lower than the current bound rate shown in the Country Schedule of Japan.

⁹ This average tariff cut includes the U.S. commitment, in Mar. 1994, to eliminate all tariffs on beer by 2002, and all tariffs on brown distilled spirits (mainly whiskey and brandy) by 2004 under the zero-for-zero initiative.

¹⁰ This average tariff cut includes commitments under the zero-for-zero initiative, including Japan's commitment, in Feb. 1994, to eliminate all tariffs on beer by 2002, and tariffs on brown distilled spirits by 2004; the European Union's (EU) commitment, in Feb. 1994, to eliminate all tariffs on beer by 2002, and tariffs on brown distilled spirits by 2000; and Australia's commitment, in Feb. 1994, to eliminate all tariffs on beer by 1999.

¹¹ Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex IC, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope, and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

¹² Understanding on Rules and Procedures Governing the Settlement of Disputes, Annex 2, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The rules and procedures in the Understanding apply to disputes brought pursuant to

agreement, geographical indications on wine and spirits are provided greater protection. For instance, other GATT countries will be prevented from manufacturing and selling products labeled as "Bourbon" or "Tennessee whiskey."

The dispute settlement provisions of the URA establish principles and procedures for retaliatory actions resulting from trade disputes. This provision offers the beverage sector, especially wine and distilled spirits, somewhat more protection from its frequent historical use as a retaliatory instrument in international trade disputes involving unrelated industries and unrelated trade infractions.

In addition, under the URA, the EU is committed to reducing production subsidies on a group of products that includes wine. However, the EU has not yet committed itself to reducing wine subsidies specifically.¹³ In 1992, the EU reportedly subsidized wine production by about \$1.29 billion, and appropriated \$1.86 billion to wine production in 1993.¹⁴ Reportedly, the overall intent of these subsidies is to reduce the oversupply of low-quality wines on the European market through various means, including the conversion of low-quality wines to ethanol, and the permanent abandonment of vineyards. Although U.S. vintners produce very little of what is considered to be low-quality wine and, thus, do not compete directly with this segment of the European wine industry, the U.S. wine industry claims that European wine subsidies are a major trade barrier that enable EU producers to undercut U.S. exports in both EU markets and in third-country markets.¹⁵

The EU also subsidizes exports of low-quality wines, and spirits distilled from certain cereals. In 1992, the EU reportedly subsidized wine exports by about \$100 million, and appropriated \$93 million in

export subsidies in 1993.¹⁶ Under the URA, the EU has committed to reducing these subsidies to \$48 million by 2000. This reduction is expected to have a negligible impact on the U.S. wine industry.¹⁷

In 1992, the EU subsidized cereals exported in the form of certain spirituous beverages by about \$74 million, and appropriated \$86 million in export subsidies in 1993.¹⁸ Under the URA, the EU has committed to reducing export subsidies on a group of products that includes this category, however, the amount of the specific reduction in this category is not stated.¹⁹ Because this subsidy tends to counterbalance the artificially high price of cereal grains paid by EU distillers, the effect of this subsidy reduction likely will be negligible.

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the U.S. trade deficit is likely to experience a small decline as a result of the URA, as U.S. beverage imports experience small growth, and U.S. beverage exports grow sizeably. The Commission's model indicates that growth in exports will be led by increases of over 15 to 25 percent for wine, distilled spirits, and beer. U.S. exports to countries participating in zero-for-zero tariff reductions for brown distilled spirits and beer, namely Japan, the EU, and Australia, will likely experience the greatest growth.²⁰ Wine exports, especially those destined for Japan and the EU, will grow largely as a result of reduced tariffs and strengthened SPS provisions.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, the growth in beverage exports likely will have a

¹⁶ *Official Journal of the European Communities*, L34, vol. 37, Feb. 7, 1994, pp. 586-587.

¹⁷ The EU has also committed to reducing its subsidies on exports of partially distilled hydrous ethanol produced from low-quality wines. However, this reduction will not affect the U.S. wine industry.

¹⁸ *Official Journal of the European Communities*, L34, vol. 37, Feb. 7, 1994, pp. 622-623.

¹⁹ The EU has committed to reducing export subsidies on "incorporated products," which include export subsidies on cereals exported in the form of certain spirituous beverages, from a base outlay of 572.5 million ECU to 366.4 million ECU in 2000.

²⁰ As Japan's tariff phaseouts on brown distilled spirits and beer under the URA zero-for-zero initiative have been staged in 10 years and 8 years, respectively, instead of the 6 years allotted for other developed-country tariff reductions, and the EU tariff phaseout on beer has been staged at 8 years, the pace of U.S. export expansion in brown spirits and beer to these destinations will be more gradual than, for instance, the pace of wine export expansion.

¹²—Continued

the consultation and dispute settlement rules and procedures of the 14 agreements relating to trade in goods (including the GATT 1994), the General Agreement on Trade in Services, the Agreement on Trade-Related Aspects of Intellectual Property Rights, and, as appropriate, the Plurilateral Trade Agreements in Annex 4, as well as consultations and the settlement of disputes concerning the rights and obligations under the provisions of the Agreement Establishing the World Trade Organization.

¹³ Independent of the URA, the EU is currently considering legislation to restructure its wine subsidy program under the EU's Common Agricultural Policy (CAP) reform.

¹⁴ "Final Adoption of the General Budget for the European Union for the Financial Year 1994," *Official Journal of the European Communities*, ISSN 0378-6978, L34, vol. 37, Feb. 7, 1994, pp. 588-591. Nearly one-half of these production subsidies support "intervention for products of the vine-growing sector," a quarter support the permanent abandonment of vineyards, and the remaining subsidies support the "taking over of alcohol from compulsory distillation," and other programs.

¹⁵ International Business-Government Counsellors, Inc., *Wine Institute International Trade Barriers Report: 1993*, (Washington, DC.), Dec. 1993.

negligible impact on production and employment in the beverage sector overall, because the large volume of domestic beverage production (especially that of soft drinks) overshadows export gains made in the alcoholic beverage industries. Production and employment in the distilled spirits and wine industries alone, however, likely will exhibit small growth of slightly more than 1 percent, which will occur primarily in California, New York, Washington, and Kentucky. The impact of the URA on U.S. beverage consumption will be negligible.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Consumer Goods (ISAC 4) is disappointed that (1) white spirits and liqueurs were not included in the zero-for-zero reductions, (2) more Southeast Asian and

Latin American markets were not opened to beer and distilled spirits, and (3) tariff phase-outs were not limited to 5 years.²¹

The Wine Institute supports the implementation of the URA if it is enforced effectively.²² The Institute affirms that the market access provisions, TRIPs provisions, and SPS agreement of the URA will benefit the wine industry, and contribute to steady industry employment, despite a likely decline in domestic consumption. The Institute expressed disappointment, however, that the market access provisions, particularly EU tariff reductions, were "far below expectations of the industry." The Institute also asserted that the U.S. tariff on wine should not have been reduced.

²¹ *Report of the Industry Sector Advisory Committee on Consumer Goods for Trade Policy Matters (ISAC 4) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 7, 1994.

²² James B. Clawson, International Business-Government Counsellors, on behalf of the Wine Institute, official submission to USITC, May 2, 1994.

CHAPTER 13

Tobacco and Tobacco Products¹

Table 13-1
Tobacco and tobacco products: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	421	391	364	-13.5
Trade data (million dollars):				
Shipments	32,086	32,420	27,931	-12.9
U.S. exports:				
Total	6,002	6,160	5,559	-7.4
GATT ² signatories	5,256	5,189	4,680	-11.0
Other	746	971	879	17.8
U.S. imports:				
Total	935	1,760	1,837	96.5
GATT signatories	849	1,551	1,667	96.3
Other	86	209	170	97.7
U.S. trade balance:				
Total	5,066	4,400	3,722	(³)
GATT signatories	4,406	3,638	3,013	(³)
Other	660	762	709	(³)
Consumption	27,020	28,020	24,208	-10.4
Import market share (percent):				
Total	3.5	6.3	7.6	(³)
GATT signatories	3.1	5.5	6.9	(³)
Other	0.3	0.7	0.7	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

As a result of the Uruguay Round Agreement (URA), there likely will be a modest positive effect

¹ The following product groups are covered in the discussion this industry sector: unmanufactured tobacco, cigarettes, and cigars and certain other manufactured tobacco. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's

(over 5 percent to 15 percent) on net trade, and a small positive effect (over 1 percent to 5 percent) on production and employment in the tobacco and tobacco products sector. Small growth in U.S. imports will precipitate a small decline in the price of U.S. imports, which will have a negligible effect (1 percent or less) on U.S. consumers. In addition to the Agreement on Agriculture, agreements on customs valuation,

²—Continued

sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

trade-related intellectual property rights (TRIPs), and sanitary and phytosanitary (SPS) measures³ likely will significantly impact this sector.

The U.S. unmanufactured tobacco industry, situated chiefly throughout the North Carolina, Virginia, and Kentucky area, annually produces nearly \$3 billion in tobacco, or approximately 10 percent of world production, and supplies 55 percent of U.S. consumption of unmanufactured tobacco. The United States produces primarily high-quality flue-cured and burley tobaccos that are marketed under a Federal price stabilization program. Imports of oriental tobacco, which are not readily substitutable for U.S.-grown tobacco, supply about 15 percent of the U.S. tobacco market.⁴

The U.S. tobacco products industry produces nearly \$30 billion in tobacco products, 93 percent of which are cigarettes. Due to successful marketing and well-established distribution channels, the United States supplies about 14 percent of the world's tobacco products, and holds a 98-percent share of the domestic market. With the exception of cigars, which are produced primarily in Pennsylvania, most U.S. tobacco products are produced in North Carolina, Virginia, Kentucky, and Tennessee.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

Although current U.S. tariffs on imports of tobacco and tobacco products range from free to the equivalent of about 40 percent ad valorem, the average trade-weighted U.S. tariff rate was equivalent to about 8.2 percent ad valorem in 1993.⁵ The current range of foreign ad valorem tariff equivalents applied to U.S. exports of tobacco and tobacco products in the largest GATT markets is free to 35 percent for Japan, 12 to 23 percent for the European Union (EU), and 25 to 117 percent for Turkey.⁶

³ The Agreements on Agriculture and Sanitary and Phytosanitary Measures are discussed in detail in ch. 3.

⁴ Oriental tobacco is substantially different from other types of tobacco and is used by the U.S. tobacco industry primarily as a flavoring agent in cigarettes.

⁵ The figures presented in this section are based on U.S. trade with all partner countries except Canada and Mexico, because U.S., Canadian, and Mexican tariffs on tobacco and tobacco products are being reduced under the North American Free-Trade Agreement (NAFTA). In 1993, U.S. trade in tobacco and tobacco products with Canada and Mexico accounted for about 23 percent of total imports, and less than 1 percent of total exports.

⁶ Japanese and European Union (EU) tariff rates from Country Schedules, Agreement on Agriculture, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. Turkish tariff rates from "Turkey's 1933 Import Regime, Agricultural Situation," prepared by U.S. Embassy, Ankara, Turkey, and sent to

Under the URA, the United States has agreed to lower its average ad valorem tariff equivalent on tobacco and tobacco products by about 2 percentage points. The average trade-weighted foreign ad valorem equivalent tariff reduction is to be about 3 percentage points.

Other Provisions

One of the most import URA provisions affecting the tobacco and tobacco products sector relates to customs valuation.⁷ U.S. exporters of tobacco and tobacco products, specifically cigarettes, claim that the duty assessed on their products at foreign borders is sometimes calculated on the basis of a falsely high transaction value. Under the valuation code of the URA, however, valuation practices are better defined so that the number and kind of additional factors used to calculate transactions value are limited. In addition, many developing countries that currently are members of the GATT have not signed the current GATT valuation code. Under the URA, however, all GATT-member countries will be required to abide by the new valuation provisions.⁸

Another significant provision of the URA involves TRIPs.⁹ Cigarette manufacturers allege that their brand names are frequently counterfeited overseas. Under this URA provision, rules and procedures are established for the protection of trademarks and other intellectual property in GATT countries. Provisions for the enforcement of these rules and for multilateral dispute settlement are also established.

⁶—Continued

the U.S. Department of Agriculture (USDA), Foreign Agricultural Service (FAS), Feb. 1, 1993. The current Turkish tariff rate presented in the Country Schedule of Turkey, Agreement on Agriculture, is a ceiling rate, not the rate actually applied to U.S. tobacco and tobacco product exports.

⁷ Agreement on Implementation of Article VII of the General Agreement on Tariffs and Trade 1994, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide greater uniformity and certainty in the implementation of rules relating to customs valuation set forth in article VII of the GATT 1994 by, *inter alia*, defining acceptable and prohibited valuation practices, increasing access to information by customs administrations, and providing for dispute settlement.

⁸ Value and Marking Branch, Office of Regulations and Rulings, Customs Headquarters, U.S. Customs Service.

⁹ Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex IC, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope, and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

In addition, the reduction of agricultural production and export subsidies in the EU¹⁰ could affect the tobacco and tobacco products sector. Under the URA, the EU is committed to reducing production subsidies on a group of products that include unmanufactured tobacco, although the EU has not yet committed to any specific reductions in tobacco subsidies. In 1992, the EU subsidized the production of unmanufactured tobacco by \$1.52 billion, and appropriated \$1.56 billion to this effort in 1993.¹¹ The EU also subsidizes the export of unmanufactured tobacco. In 1992, these export subsidies were about \$74 million, and \$84 million was appropriated for export subsidies in 1993.¹² The EU is committed to reducing this subsidy to \$47 million by the year 2000.

Another URA provision that could benefit the unmanufactured tobacco industry is the provision on SPS measures. SPS provisions will discourage the imposition of nontariff barriers (NTBs), such as unsubstantiated claims of blue mold and other tobacco diseases, that restrict U.S. tobacco exports. Given that China is most frequently cited as applying such NTBs against U.S. tobacco, the SPS agreement likely will have an even greater impact if China becomes a member of GATT.¹³

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the URA likely will encourage a modest improvement in the United States' already large positive trade balance in tobacco and tobacco products. Under the URA, U.S. imports will experience small growth. In 1993, the United States imported over \$1.8 billion in tobacco and tobacco products, much of which included unmanufactured tobacco from Brazil, Turkey, and the EU, and cigarettes from Canada. The small growth in imports will occur primarily in cigarettes¹⁴ that will most likely compete in the discount segment of the U.S. cigarette market.¹⁵ U.S. sector exports in 1993 were nearly \$5.6 billion, and included mostly exports of cigarettes¹⁶ to Japan, Saudi Arabia, and Hong Kong, and unmanufactured tobacco to the EU and Japan. It is likely that sector exports will grow modestly (over 5 to 10 percent) due to the URA. There is unlikely to be any change in major export markets. The modest

¹⁰ Turkish production subsidies on unmanufactured tobacco are also subject to reduction. However, little information is yet available on the current and negotiated subsidy levels.

¹¹ "Final Adoption of the General Budget for the European Union for the Financial Year 1994," *Official Journal of the European Communities*, ISSN 0378-6978, L34, vol. 37, Feb. 7, 1994, pp. 590-593. These production subsidies consist almost entirely of premiums for tobacco.

¹² *Ibid.* pp. 590-591.

¹³ The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

growth in exports likely will be equally distributed between unmanufactured tobacco,¹⁷ cigars, smoking tobacco, reconstituted and blended tobaccos, and cigarettes.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, modest improvement in this sector's trade balance will precipitate small growth in production and employment. The states most affected by increased production and employment in the sector will be North Carolina and Virginia.

Implementation of the URA also likely will cause a small decline in the price of U.S. sector imports. However, inasmuch as imports represent only 6 percent of U.S. consumption, this small price decline will have only a negligible positive effect on consumers.

U.S. Industry Positions on the URA

In the Agricultural Technical Advisory Committee (ATAC) report on tobacco, representatives of the unmanufactured tobacco and tobacco products industries state that the URA market access gains in tobacco were only minimal.¹⁸ Though the ATAC does not expect significant export gains to result from the URA, it believes the URA will help the industry maintain its current competitive position in the world market.

¹⁴ The URA likely will cause U.S. imports of unmanufactured tobacco to increase by a negligible amount. The domestic content legislation on cigarettes imposed by the United States in Aug. 1993, contributes to the negligible effect the URA is expected to have on U.S. imports of cigarette leaf tobacco. *Omnibus Budget Reconciliation Act of 1993*, sec. 1106, Public Law 103-66, 107 Stat. 318, Aug. 10, 1993.

¹⁵ The discount segment of the U.S. cigarette market refers to the market for branded, private-label, and generic cigarettes, which are seldom advertised and which are sold at approximately one-half the price of the well-advertised premium brands.

¹⁶ Through U.S. Department of Commerce data indicate that U.S. cigarette exports to the EU are nearly \$1 billion, most of these exports are not actually consumed in the EU, but are transhipped via Belgium to various destinations in Eastern Europe, the former Soviet Union, Asia, and the Middle East.

¹⁷ If the EU reduces its tobacco production subsidies by any significant amount, U.S. exports of unmanufactured tobacco to the EU and markets currently supplied by the EU could experience even greater growth.

¹⁸ *Report of the Agricultural Technical Advisory Committee (ATAC) for Tobacco on the Uruguay Round of GATT Negotiations*, Jan. 12, 1994.

The ATAC supports the elimination of U.S. tariffs on cigar wrapper and reduction of U.S. tariffs on cigar filler and binder tobacco effective upon ratification of the agreement, instead of over 6 years. In addition, the ATAC requests that Congress authorize the negotiation of accelerated URA tariff reductions in URA implementing legislation.

CHAPTER 14

Tropical and Specialty Agricultural Products¹

Table 14-1
Tropical and specialty agricultural products: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	738	739	739	0.1
Trade data (million dollars):				
Shipments	126,209	128,687	128,687	2.0
U.S. exports:				
Total	3,246	3,709	4,208	29.6
GATT ² signatories	2,779	3,257	3,589	29.1
Other	467	452	619	32.5
U.S. imports:				
Total	5,826	5,953	5,898	1.2
GATT signatories	5,369	5,515	5,447	1.5
Other	458	437	451	-1.5
U.S. trade balance:				
Total	-2,580	-2,244	-1,690	(³)
GATT signatories	-2,590	-2,258	-1,858	(³)
Other	9	15	168	(³)
Consumption	128,789	130,931	130,377	1.2
Import market share (percent):				
Total	4.5	4.5	4.5	(³)
GATT signatories	4.2	4.2	4.2	(³)
Other	0.4	0.3	0.3	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis ² and U.S. Competitive Position

The Uruguay Round Agreements (URA) should have a negligible but positive effect (1 percent or less)

¹ The following product groups are covered in the discussion of this industry sector: live plants; seeds; cut flowers; miscellaneous vegetable substances; coffee and tea; spices; edible preparations; and cocoa, chocolate, and confectionery. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely

on net trade, production, employment, and consumers in the tropical and specialty agricultural products sector. Although a large part of U.S. and world trade in these products is already duty-free, agreements on sanitary and phytosanitary (SPS) measures and trade-related intellectual property rights (TRIPs), in

²—Continued
impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

addition to the Agreement on Agriculture,³ may benefit products in this sector. Moreover, many industries of this sector are internationally competitive or do not compete directly with U.S. producers.

The tropical and specialty agricultural products sector contains a diverse set of products, many of which are not grown commercially in the United States but are imported and processed for U.S. consumption and export. The most significant products produced in the United States, by value, are edible preparations, such as prepared food mixes, prepared coffee, packaged tea, and chocolate and confectionery. Other important domestic industries include live plants, seeds, spices, miscellaneous vegetable substances, and cut flowers. In the aggregate, U.S. shipments of sector products total about \$128 billion annually.

The sector products that are tropical in nature, e.g., coffee, tea, cocoa beans, and certain spices, are generally exported as raw goods from producing countries to developed countries, including the United States, in an unprocessed form. The developed countries, in turn, process the raw products for internal consumption and for export to world markets. The United States is among the world's leading importers and processors of these products and is a leading consumer and exporter of the processed products as well.

The United States has significant competitive advantages in the production of live plants, seeds, and certain miscellaneous vegetable substances. An abundance of arable land, a diversity of climates, and a system of intellectual property rights protection that encourages and rewards long-term research, gives the United States a competitive advantage in the production of these commodities.

In addition, the U.S. industries producing confectionery and edible preparations (e.g., bakery products, prepared food mixes, and alimentary pastes) tend to be dominated by large international conglomerates (e.g., Nestle, Philip Morris, Hershey Food Corp., and M&M MARS) that compete with other large conglomerates around the world and with each other. Over the last decade, in anticipation of the consolidation of the European Union (EU), the North American Free Trade Agreement (NAFTA), and the URA, there has been an aggressive trend by these large conglomerates to position themselves even more advantageously around the world.

Key Uruguay Round Provisions Affecting Trade

Tariff Provisions

The current average effective tariff rate for U.S. imports in the sector is 1.6 percent ad valorem

³ The Agreements on Agriculture and Sanitary and Phytosanitary Measures are discussed in detail in ch. 3.

equivalent. Under the URA, this rate is to be reduced by 30 percent, or 0.5 percentage point. The rates of duty within the sector vary considerably, with about 67 percent of U.S. imports in 1993 being duty-free commodities, such as coffee, tea, unprocessed spices, and cocoa beans from Canada or Mexico.⁴ Articles included in this sector that have significant U.S. ad valorem duties include: cut flowers (8 percent), various edible preparations (up to 17.5 percent), confectionery (7 percent), and miscellaneous vegetable substances (up to 10 percent).

Major trading partners of the United States for sector products include the EU and Japan. EU reductions offered for products of this sector vary, but average 36 percent. Specific EU tariff reduction offers include a 50-percent duty reduction for cut flowers, 41 percent for seeds, 35 percent for edible preparations, and a 32-percent cut for cocoa, chocolate, and confectionery products.

Japan has agreed to reduce its tariffs about 25 percent, on average. Specific reductions include a decrease for candies, caramels, and other sugar confectionery, from 35 to 25 percent ad valorem (29 percent); chewing gum, from 30 to 24 percent ad valorem (20 percent); and on edible preparations, an average decrease of 39 percent.

Other Provisions

Exports to the United States of sweetened cocoa powder, flour mixes and doughs, certain edible preparations containing over 10 percent sugar, certain edible preparations containing milk or butterfat, and chocolate crumb (an incompletely processed form of chocolate) are currently subject to import quotas under section 22 of the Agricultural Adjustment Act. Under the URA, these absolute quotas will be replaced by tariff-rate quotas.⁵

The section 22 quota on chocolate crumb currently is 16,000 metric tons. Under the URA, the tariff-rate quota will be increased to 26,700 metric tons in equal annual installments over a 10 year period ending in 2005. Four other current section 22 quotas (Harmonized Tariff Schedule (HTS) 9904.10.60, 9904.10.75, 9904.10.78, and 9904.10.81) will be combined under the URA in a single tariff-rate quota. This quota will be allocated by countries as previously applied, with specific allocations to Australia, Belgium and Denmark, and "any other country." The aggregate quota amount is the same as that provided for under the previous section 22 quotas, but the product mix under

⁴ Duties for U.S. imports from these countries will be reduced under the North American Free-Trade Agreement (NAFTA).

⁵ The over-quota tariff rates are based on the tariff equivalents of the quotas on the constituent ingredients in the products (i.e., sugar, butterfat, and nonfat milk solids). The over-quota tariff rates will be reduced by the minimally-required 15 percent. In general, the over-quota rates of duty are at levels high enough to preclude trade.

the combined tariff-rate quota could be substantially different than that provided under previous absolute quotas.

The inclusion of a more transparent and consistent SPS discipline and strengthened intellectual property protection under the URA, will benefit certain products of this sector, particularly seeds and cut flowers.⁶

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the URA are likely to have a negligible positive net effect on U.S. trade in tropical and specialty agricultural products; both imports and exports will increase by a small amount due to tariff reductions. Over 60 percent of the products in this sector currently enter the United States under duty-free trade provisions or the NAFTA and the estimated average duty reduction under the URA will be less than 0.5 percentage point.

⁶ Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex IC, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope, and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

⁷ Seed development is classified as "plant invention" and is thus categorized as intellectual property.

However, SPS and TRIPs provisions will benefit some sector products to a greater extent.

Likely Impact on U.S. Production, Employment, and Consumers

The URA likely will have a negligible positive effect on sector production and employment because trade effects are expected to be minimal.

The impact of the URA on U.S. consumers of the products included in this sector is also likely to be negligible, with the primary benefit a wider selection of imported products.

U.S. Industry Positions on the Uruguay Round Agreements

The Floral Trade Council (FTC) believes that small reductions in EU tariffs for fresh cut flowers are unlikely to stimulate U.S. exports of such products. However, the SPS agreement should facilitate U.S. exports of fresh cut flowers. The FTC is concerned that the "sunset provision" of the antidumping agreement may reduce the utility of the law for materially injured industries.⁸

⁸ Stewart and Stewart, on behalf of the Floral Trade Council, official submission to U.S. International Trade Commission (USITC), May 2, 1994.

CHAPTER 15

Wood and Lumber Productsⁱ

Table 15-1
Wood and lumber products: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	418	422	425	1.7
Trade data (million dollars):				
Shipments	50,893	54,844	59,100	16.1
U.S. exports:				
Total	6,381	6,727	7,284	14.2
GATT ² signatories	5,878	6,287	6,847	16.5
Other	504	441	438	-13.1
U.S. imports:				
Total	5,248	6,696	8,833	68.3
GATT signatories	4,778	6,171	8,252	72.7
Other	470	524	581	23.5
U.S. trade balance:				
Total	1,133	31	-1,549	(³)
GATT signatories	1,100	116	-1,405	(³)
Other	33	-84	-143	(³)
Consumption	49,760	54,813	60,649	21.9
Import market share (percent):				
Total	10.5	12.2	14.6	(³)
GATT signatories	9.6	11.3	13.6	
Other	1.0	1.0	1.0	

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will have a negligible negative impact (1 percent or less) on

¹ The following product groups are covered in the discussion of this industry sector: logs and rough wood products; lumber; moldings, millwork, and joinery; structural panel products; wooden containers; tools and tool handles of wood; miscellaneous articles of wood; and cork and rattan. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's

the U.S. trade balance in the wood and lumber product sector. Existing U.S. tariffs are relatively low, and most U.S. lumber imports either supplement inadequate domestic supplies³ or are of species not produced domestically.⁴ Also, a substantial portion of U.S. trade is covered by the North American Free-Trade

²—Continued

sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

³ Mainly softwood lumber.

⁴ Mainly tropical hardwood.

Agreement (NAFTA). Foreign tariff reductions under the URA are also expected to be minor and likely will result in a negligible change in exports. Domestic market conditions, particularly with respect to supply constraints imposed by environmental concerns, and relatively inelastic demand in the sector may modify the effects of the URA. The URA are expected to have a negligible negative effect on U.S. production and employment and a negligible positive effect on consumers. Tariff provisions are the most important factor for this sector, but agreements on preshipment inspection, rules of origin, sanitary and phytosanitary (SPS) measures,⁵ and technical barriers to trade also will affect this sector.

The United States is the world's leading producer of wood and lumber products,⁶ with about a 16-percent share of the quantity of global production in 1991. Other prominent world producers include the former Soviet Union countries. Roundwood (logs) accounted for the majority of U.S. production (79 percent of quantity in 1991), and coniferous species accounted for the bulk (62 percent in 1991) of roundwood production. The United States is the leading global consumer of wood and lumber products, trailing the European Union (EU) and Japan as an importer of these products; domestic production supplies an estimated 97 percent of domestic consumption of wood and lumber products.⁷ The United States is the world's leading exporter of these products, accounting for about 17 percent of the quantity of total exports in 1991 (mainly roundwood). Canada closely trails the U.S. export share, with sawnwood (lumber) the predominant export product. The U.S. sector is among the most competitive in the world, as it has access to relatively abundant stands of timber; it employs sophisticated technology that has contributed to increasing labor productivity; and it benefits from extensive infrastructure that assists in timber harvesting, processing, and distribution. However, recent government regulation, based on environmental issues,⁸ has constrained the supply of domestic timber available to the U.S. sector.

The U.S. wood and lumber products sector generally is concentrated around timber resources. The major geographic regions include the Pacific Northwest and the Southeast (mainly softwood products) and the Northeast and Upper Midwest (mainly hardwood products). Softwood species

⁵ The Agreements on Agriculture and Sanitary and Phytosanitary Measures are discussed in detail in ch. 3.

⁶ Principally roundwood (logs), sawnwood (lumber), and wood-based panels (mainly veneer and plywood).

⁷ This figure may be artificially high, as it includes substantial double counting of upstream production. In contrast, U.S. softwood lumber imports account for nearly a third of consumption.

⁸ Significant environmental regulations include those involving old growth forests, the northern spotted owl, wild Pacific salmon runs, and the marbled murrelet.

account for about three quarters of the sector's output. Softwood is used primarily for structural purposes; hardwood is used primarily for furniture and decorative purposes.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The calculated aggregate U.S. tariff for this sector was about 1.1 percent ad valorem based on 1993 trade. This tariff ranged from zero for logs, rough wood products, and lumber to 5.4 percent for cork and rattan products. The United States has agreed to reductions amounting to an average of 1 percentage point.

The following tabulation shows tariff ranges faced by U.S. exports of lumber and wood products in major GATT markets:⁹

Market	Tariff range (percent ad valorem)
Canada	0-17.5
Mexico	0-20
Japan	0-20
Republic of Korea	2-15
EU	0-10
Taiwan	0-20
Australia	0-40

On average, foreign tariffs faced by U.S. exports of wood and lumber products are to decline by a relatively small absolute amount (about 0.2 percentage point) as a result of the URA.

Other Provisions

Other provisions of the URA that likely will affect the U.S. wood and lumber products sector involve preshipment inspection,¹⁰ rules of origin,¹¹ SPS measures, and technical barriers.¹² Progress in these

⁹ Canadian and Mexican tariffs will be reduced under the North American Free-Trade Agreement (NAFTA).

¹⁰ Agreement on Preshipment Inspection, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The Agreement seeks to ensure that PSI activities are carried out in an objective, uniform, and non-discriminatory manner that does not create trade barriers.

¹¹ Agreement on Rules of Origin, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement sets forth a timetable under which GATT rules of origin will be developed and implemented. The agreement establishes a working committee to consult with the Customs Cooperation Council, a non-GATT entity, in developing GATT rules of origin. The agreement is intended to ensure that such rules are clear and are applied in an impartial, transparent, predictable, consistent, and neutral manner.

¹² Agreement on Technical Barriers to Trade, Final Act Embodying the Results of the Uruguay Round of

areas likely will increase transparency and market access for U.S. exports of wood and lumber products.

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the overall effect of the URA on U.S. trade in the wood and lumber products likely will be negative but negligible. Both imports and exports likely will experience a negligible rise, but imports likely will rise at a greater rate than exports. Tariff reductions are not expected to appreciably affect trade because existing duties in the United States and other major markets are relatively low. In addition, a substantial portion of U.S. trade (three fourths of imports and 22 percent of exports in 1993) is covered by NAFTA. U.S. imports of wood and lumber products generally comprise complementary products not produced domestically (mainly tropical hardwood) and supplementary products not domestically produced in sufficient quantities to satisfy demand (mainly softwood). Imports typically account for about 10 to 15 percent of the value of the U.S. market; principal suppliers include Canada, Indonesia, Mexico, and China. U.S. exports are dominated by lower-valued, less-processed items, such as logs and rough wood products. Exports typically account for slightly more than 10 percent of the value of U.S. shipments; major markets include Japan, Canada, and the EU. Foreign duty reductions and lower NTBs may contribute to a product shift in U.S. exports to higher-value, further-processed products, particularly to Japan. However, NTBs, particularly in Japan, likely will limit the positive effect of the URA on U.S. exports. Environmental considerations in the United States and several other regions probably will limit future supplies, thus modifying the effects of the URA.

¹²—Continued
Multilateral Trade Negotiations. The agreement seeks, among other things, to ensure that technical regulations and standards, and procedures for assessment of conformity with technical regulations and standards, do not create unnecessary obstacles to international trade.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, the URA likely will have a negligible negative impact on U.S. sector production and employment levels and a negligible positive effect on U.S. consumers. The relatively low absolute level of global duty reductions, coupled with supply constraints, likely will limit trade effects that impact the domestic industry and consumers.

U.S. Industry Positions on the URA

The U.S. wood and wood products sector is represented by the Industry Sector Advisory Committee for Lumber and Wood Products (ISAC 10). ISAC 10 will not support either the market access agreement or the overall URA in the absence of zero-for-zero tariff reductions by the United States, Canada, EU, and Japan on wood products in chapter 44 of the Harmonized Tariff Schedule (HTS).¹³ In addition, the ISAC 10 expressed concern about provisions in the Dispute Settlement Understanding that may limit the use of section 301 by the U.S. Government.¹⁴

The American Forest and Paper Association (AFPA) generally feels that the URA failed to provide reciprocity in tariff reductions for the sector and indicated that the impact of the URA will likely be negative. The AFPA feels that the major shortcoming of the URA for the wood sector is the failure to achieve zero-for-zero tariff reductions among the United States, Canada, EU, and Japan.¹⁵

¹³ *Report of the Industry Sector Advisory Committee for Lumber and Wood Products (ISAC 10) on the Uruguay Round Negotiations*, Jan. 10, 1994.

¹⁴ Section 301 has been used in the past to improve access to the Japanese market for wood and lumber products.

¹⁵ American Forest and Paper Association, official submission to U.S. International Trade Commission (USITC), May 2, 1994.

CHAPTER 16

Paper, Pulp, and Printed Matters

Table 16-1
Paper, pulp, and printed matter: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	2,000	2,000	2,000	0.0
Trade data (million dollars):				
Shipments	282,000	287,000	292,000	3.5
U.S. exports:				
Total	13,159	14,001	13,454	2.2
GATT ² signatories	12,094	12,986	12,411	2.6
Other	1,065	1,015	1,043	-2.1
U.S. imports:				
Total	11,895	12,002	12,561	5.6
GATT signatories	11,703	11,762	12,262	4.8
Other	192	240	299	55.7
U.S. trade balance:				
Total	1,264	1,999	893	(³)
GATT signatories	391	1,224	149	(³)
Other	873	775	744	(³)
Consumption	280,736	285,000	291,107	3.7
Import market share (percent):				
Total	4.2	4.2	4.3	(³)
GATT signatories	4.2	4.1	4.2	
Other	0.0	0.1	0.1	

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) are likely to increase both imports and exports of paper and

I The following industry groupings are covered in this discussion: paper boxes and bags, industrial papers and paperboards, newsprint, printing and writing papers, certain specialty papers, miscellaneous paper products, pulp and waste paper, and printed matter. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely

printed matter³ by a small degree (over 1 percent to 5 percent), with a negligible positive net effect on trade. The overall effect on domestic production, employment, and consumers should be negligible (1 percent or less). In addition to tariff reductions, the agreement on preshipment inspection is also expected to benefit this sector.

²—Continued
impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

³ Pulp and waste paper trade is removed from this sector analysis since present tariffs in many developed

The United States is the world's largest paper and paperboard producer and consumer, accounting for 29 percent of global production,⁴ and 32 percent of consumption. About 13 percent of the world's paper and paperboard mills are in the United States.⁶ The United States is also a major world producer of most categories of printed matter and ranks among the top nations in trade of printed matter.

The regionally diverse, \$166 billion printed matter graphics industry is comprised primarily of more than 60,000 relatively small establishments that employed about 1.5 million persons in 1993. Conversely, the more regionally concentrated \$120 billion paper and paperboard industry is made up of fewer than 100 very large companies that employed about 464,000 persons in 1993.

The paper and paperboard sector is very capital-intensive. Important factors of competition include an ample natural resource base, existing infrastructure, favorable environmental regulations, and proximity to consumer markets. The Southeastern United States contains the largest portion of the paper and paperboard industry. However, there are also producers in the Mid-Atlantic, Northeastern, Great Lakes, and Pacific Northwestern States. The primary competitive factors related to printed matter are paper and labor for printing, and timeliness and service for publishing. The U.S. printing and publishing industry (graphics industry) produces some of the most diverse products and is one of the most geographically dispersed industrial activities in the United States. The graphics industry ranges from labor-intensive printing activities to highly automated publishing processes. It is estimated that there were 60,000 graphics establishments, located in almost every county of every state in the country in 1993. Most domestic printers and publishers concentrate their marketing efforts on the large U.S. market rather than foreign markets.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

In 1993, excluding pulp imports, which are duty-free, about 97 percent of all U.S. sector imports entered from GATT-signatory countries, but only about 23 percent of these imports were dutiable. The trade-weighted duty for these imports was

³—Continued

countries are already zero and the bound duty rates for pulp in many less-developed countries are usually waived. Pulp trade is relatively large; in 1993, U.S. exports of pulp and waste paper amounted to \$3 billion, while U.S. imports amounted to \$1.9 billion.

⁴ 1993 FAO Pulp & Paper Survey.

⁵ Derived from data provided by Pulp and Paper International, *Annual Review*, pp. 32-37, July 1992.

⁶ Ibid.

2.3 percent in 1993. Under the URA, the United States has agreed to phase out nearly all sector duties to zero.

In 1993, GATT-signatory markets accounted for about 93 percent of this sector's exports (excluding pulp and waste paper). About one-half of GATT exports went to Canada and Mexico, which will reduce tariffs under the North American Free Trade Agreement (NAFTA). Under the URA, it is estimated that the average trade-weighted duty facing U.S. paper and paperboard exports to other GATT signatories, would fall by about 4.4 percentage points. The largest reductions are to be in paper and paperboard tariffs in the European Union (EU) (reduced 8 percentage points), Korea (12.5 percentage points), Australia (10 percentage points), and Japan (2.3 percentage points).⁷ Smaller tariff reductions offered for printed matter in major markets include the EU (1.05 percentage points), Japan (.04 percentage point), and Australia (0.8 percentage point).

Other Provisions

The URA preshipment inspection rules⁸ should standardize and limit the involvement of inspection companies (especially in some of the developing countries). In the past, these nontariff barriers (NTBs) have interfered with the flow of U.S. exports of paper and paperboard. The increased transparency of dispute settlement is also expected to have an overall beneficial effect on both the domestic and foreign industries.

Likely Impact on U.S. Trade

In 1993, U.S. sector imports were \$10.7 billion and accounted for about 3.7 percent of total domestic consumption. About \$6.8 billion or about 64 percent of imports were accounted for by NAFTA countries (primarily Canada). According to the Commission's sectoral model, the URA likely will result in a small increase in imports. Increased imports are likely to include a variety of paper types, custom-made converted paper and paperboard products, and commercially published material.

In 1993, U.S. sector exports⁹ amounted to \$10.5 billion. However, only about \$5 billion or 48 percent in U.S. exports would be affected by the proposed agreement. About \$779 million of all exports were accounted for by non-GATT countries, while

⁷ The European Union (EU) tariff reductions are somewhat backloaded (i.e., there are more tariff reductions scheduled for the sixth-through-tenth-year period than for the first-through-fifth-year period).

⁸ Agreement on Preshipment Inspection (PSI), Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to ensure that PSI activities are carried out in an objective, uniform, and non-discriminatory manner that does not create trade barriers.

⁹ Excluding U.S. pulp and waste paper exports.

another \$4.7 billion of exports were subject to tariff reductions under NAFTA. According to the Commission's sectoral model, the URA likely will result in a small increase in exports. U.S. exports of kraft linerboard (the facing material for corrugated containers) and exports of other types of packaging papers are expected to especially benefit from the URA. In addition, U.S. exports of commercially printed products are expected to benefit as a result of greater market access for U.S. catalogs and other printed items.

Likely Impact of U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, the URA likely will have a negligible effect on domestic production and employment. Decreases in production and employment due to increased imports will be offset by increases due to increased exports. The price of the domestic product likely will remain unchanged, while the price of the imported product likely will decline slightly, benefitting consumers negligibly.

U.S. Industry Positions on the URA

The U.S. paper and paperboard sector is generally satisfied that tariff reductions in priority markets (i.e., the EU, Japan, and Korea) were attained. However, the sector believes that staging for proposed tariff reductions is too lengthy and estimates that 10-year staging (versus a 5-year staging period) will reduce their potential benefits by \$3.3 billion.¹⁰ The sector is also concerned that the EU has heavily backloaded some of its tariff reductions on to the second 5-year period.¹¹

¹⁰ *Report of the Industry Advisory Committee on Paper and Paper Products for Trade Policy Matters (ISAC 12) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

¹¹ Maureen Smith, Vice President, International Paper Group, American Forest Products and Paper Association, U.S. International Trade Commission (USITC) staff telephone conversation, Mar. 28, 1994.

The sector is pleased with the URA preshipment inspection rules and believes that the increased transparency of dispute settlement procedures under GATT will be beneficial.¹² However, the paper industry is concerned that some very competitive developing countries have agreed to bind their tariffs at unreasonably high levels. For example, Brazil agreed to bind most tariffs at 25 and 35 percent, Chile agreed to bind all tariffs at 32 percent, and Indonesia agreed to bind most tariffs at 40 percent.

Some sector officials perceive a potentially unfair competitive advantage concerning "greenlight subsidies," whereby a foreign industry could receive a state subsidy to make certain capital-intensive environmental improvements without being subject to international countervailing duties. There is also concern that the Work Program on Trade and Environment, established under the World Trade Organization (WTO), could be used against U.S. exporters of pulp, paper, or paperboard,¹³ if U.S. trading partners arbitrarily determine that U.S. sector exports are being harvested or produced in a manner that is counter to the provisions of this program.

The graphics industry is generally pleased with the URA approach to the improvement in protection of international copyrights.¹⁴ The industry anticipates increased exports in certain niche product areas where foreign duties are to be reduced on commercially printed products, especially for English-language printed materials.¹⁵ The URA should aid exports of printed matter, which still account for only about 2 percent of total U.S. production of printed matter, a value well below that of most industrialized countries.¹⁷

¹² *ISAC 12 Report*, Jan. 1994.

¹³ *Ibid.*

¹⁴ For example, a market country reportedly might have authority to decide that "clear-cutting" is deleterious to the environment. Clear-cutting small parcels of land is a very common practice among small landholders in Southeastern United States. Pulp and paper produced from logs harvested from these small land parcels eventually goes to make kraft linerboard, and is exported.

¹⁵ U.S. Department of Commerce, International Trade Administration, "U.S. Exports of the Printing & Publishing Industry," *Flash Report, First Look at the Uruguay Round*, Dec. 1993.

¹⁶ *Ibid.*

¹⁷ *Ibid.*

CHAPTER 17

Cotton¹

Table 17-1
Cotton: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Acreages (1,000)	14,052	13,240	13,660	-2.8
Trade data (million dollars):				
Production	4,912	4,250	4,247	-13.5
U.S. exports:				
Total	2,480	1,999	1,528	-38.4
GATT ² signatories	2,012	1,702	1,396	-30.6
Other	467	297	132	-71.8
U.S. imports:				
Total	4	(³)	(³)	-88.2
GATT signatories	3	(³)	(³)	-86.4
Other	1	0	(³)	-94.0
U.S. trade balance				
Total	2,476	1,998	1,527	(⁴)
GATT signatories	2,010	1,701	1,395	(⁴)
Other	467	297	132	(⁴)
Consumptions	2,681	2,686	2,699	0.7
Import market share (percent):				
Total	(⁶)	(⁶)	(⁶)	(⁴)
GATT signatories	(⁶)	(⁶)	(⁶)	
Other	(⁶)	(⁶)	(⁶)	

¹ Acreage data are used instead of employment data and production data are used instead of shipment data because they are more meaningful for this commodity.

² General Agreement on Tariffs and Trade (GATT).

³ Less than \$500,000.

⁴ Not applicable for purposes of comparison.

⁵ Consumption is calculated from actual mill use.

⁶ Less than 0.05 percent.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA), particularly the Agreement on Agriculture,³ are likely

¹ The sector covered in this discussion is cotton not carded or combed (also known as raw cotton). See app. F, vol. II, for trade tables for this sector.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely

to result in negligible negative effects (1 percent or less) on net trade in the cotton sector. Although the URA increases the potential for more open markets for

²—Continued
impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

³ The Agreement on Agriculture is discussed in detail in ch. 3.

raw cotton,⁴ the impact of the URA on U.S. cotton exports should be a negligible increase. U.S. imports of cotton are likely to rise by a small amount (over 1 percent to 5 percent) owing to increased import quotas that are, nevertheless, likely to go unfilled. U.S. production and employment are significantly affected by domestic programs, such as the Acreage Reduction Program (ARP) and cotton deficiency payments, that will not be affected by the URA. As a result, effects on sector production and employment likely will be negligible. Consumers may also benefit to a negligible degree due to somewhat lower prices.

The United States is a major producer and consumer of cotton, second only to China. In marketing year (MY) 1993/94,⁵ the United States produced 19 percent of world production (16.3 million bales),⁶ and domestic consumption was 12.5 percent of world consumption (10.2 million bales). U.S. textile mills annually consume almost 9.2 million bales⁷ or close to one-half of the U.S. cotton supply. According to the industry,⁸ over one-half of the cotton consumed by mills is converted into apparel, about one-third is used in producing home furnishings, and the remaining 17 to 20 percent is used in manufacturing industrial products.⁹

Relative to some foreign producers, U.S. cotton producers use methods that are technologically advanced, including the use of genetically engineered seeds. The United States also has established a sophisticated set of standards that are recognized, accepted, and utilized the world over. Other important world producers of cotton include China, India, Pakistan, and Egypt. These countries' comparative advantage is one of land and climate. Egypt is known for producing extra long staple (ELS) cotton that competes with U.S. Pima cotton. Most of U.S. cotton production (98 percent) is upland cotton that requires a hot, dry climate. Domestic cotton production is centered in Arizona, California, Arkansas, Mississippi, and Texas.

⁴ Based on conversations between U.S. International Trade Commission (USITC) staff and representatives of the National Cotton Council and the American Cotton Shippers Association.

The cotton marketing year begins Aug. 1 and runs through July 31. The most recent market year is Aug. 1, 1992-July 31, 1993. Data on market year production, consumption, production, and trade in quantities are taken from the U.S. Department of Agriculture (USDA), Economic Research Service (ERS), Nov. 1993 data and estimates; and USDA, ERS, *Cotton and Wool, Situation and Outlook Report* (CWS-74), Nov. 1993.

⁶ A bale is defined as weighing 480 pounds (218 kilograms (kg)).

⁷ Two million metric tons.

⁸ National Cotton Council of America, *Cotton Counts Its Customers*, 1993.

⁹ Based on USDA, ERS, Nov. 1993 data and estimates; and USDA, ERS, *Cotton and Wool, Situation and Outlook Report* (CWS-74), Nov. 1993.

Key Uruguay Round Provisions Affecting the Sector

Tariff Provisions

The current U.S. calculated trade-weighted duty for the sector is 6.6 percent. Under the URA, this rate is to be reduced about 1 percentage point. At present, U.S. import tariffs on raw cotton range from free to 4.4 cents/kilogram (kg), according to the staple length.¹⁰

The following tabulation summarizes foreign tariff information as of April 1, 1994, for leading producers and importers of cotton. The foreign trade-weighted average tariff reduction is to be slightly over 1 percent.

Nation	Current Offer Percent	
Cotton producing nations		
Mexico	50	45
Pakistan	9	100
India	40	85
Indonesia	30	30
Thailand	5	4.5
European Union	Free	Free
Venezuela	50	40
Nations not producing cotton		
Singapore	27	10
Japan	Free	Free
Korea	10	2
Malaysia	Free	Bound
Hong Kong	Free	Bound

Note.—Offers which are higher than the current rates result from the tariffication of quotas. "Bound" indicates that the tariffs have been permanently bound at zero as a formal GATT commitment.

Other Provisions

The URA does not require any modifications in the domestic aspects of the U.S. cotton program, and overall domestic support levels for cotton will not have to be reduced. However, there are a number of URA provisions of particular importance to this sector.

Access to the U.S. market under the Agreement on Agriculture is to rise from the current cumulative quota of about 124,000 bales" as section 22 quotas are converted to a tariff-rate quota. The quota for U.S. raw cotton imports is to rise in 1995 to 238,000 bales,

¹⁰ Tariff rates for raw cotton under section 22 quotas are specified in Harmonized Tariff Schedule (HTS) subheading 9904.30.10.

¹¹ Based on the total quota number of bales (of 218 kg each) listed in HTS subheadings 9904.30.10 through 9904.30.40. The cumulative quota breaks down into three quotas: 6.6 million kg, or 30,204 bales, of cotton with a staple length under 28.575 millimeters (mm) (country-specific quotas); 2.8 million kg, or 12,621 bales, for staple lengths 28.575 mm to 34.925 mm (general quota); and 17.6 million kg, or 80,725 bales, of cotton with a staple length of over 34.925 mm (general quota).

or 3 percent of U.S. consumption during the 1986-88 base period. By the year 2000, this quota is to rise in equal annual installments to 397,000 bales or 5 percent of base year consumption. U.S. tariff rates for raw cotton imports depend on whether imported volumes are above or below quota levels. In-quota imports will be subject to the existing tariff rates. For above quota cotton imports, URA tariff rates of 36.9 cents/kg are to be imposed in 1995. These tariffs for above-quota raw cotton are to be reduced under the URA by the minimum 15 percent to 31.4 cents/kg by the year 2000.

Under the URA, quota volumes are to be allocated according to the following conditions: (1) 45,830 bales will be allocated to Mexico; (2) volumes equal to the current section 22 quotas will be allocated to countries currently having a section 22 quota amount; and (3) the remainder of the quotas will be allocated to all countries on a first-come, first-served basis.

The present cotton quotas largely have gone unfilled because the quantities allotted are generally too low to be commercially viable for exports. For the same reason, the URA-negotiated quotas are not expected to be filled.

Likely Impact on U.S. Trade

The URA are expected to have a negative negligible effect on net trade. According to the Commission's sectoral model, the URA are likely to have a positive but negligible impact on U.S. sector exports, owing to greater foreign market access and lower foreign tariffs. The URA are likely to result in a small rise in U.S. cotton imports. However, the tariff-rate quotas are expected to remain unfilled, as noted earlier.

Likely Impact on U.S. Production, Employment, and Consumers

Since the Agreement on Agriculture does not require any modifications to the domestic cotton program, and the effects on net trade are likely to be negligible, it is likely that the URA will have a negligible but positive impact on U.S. production of raw cotton, or on the acreage devoted to the production of this commodity.

The impact of the URA on U.S. consumers of these products is likely to be negligible but positive, owing to a negligible decrease in the price of U.S. products and, at most, a small fall in the prices of imports. Insofar as raw cotton is an industrial input with a demand derived from the demand for cotton textiles,

increased imports from GATT countries would not affect the variety of available products.

U.S. Industry Positions on the URA

In its official press release on the URA¹² the National Cotton Council (NCC) stated its hope that the United States would obtain increased market access for cotton and textiles, noting that such access was crucial. The cotton industry is pleased with the U.S. tariff level established for raw cotton imports, but disappointed with certain URA provisions concerning international trade in textiles. According to the NCC and the American Cotton Shippers Association (ACSA), the URA does nothing to address damages caused by unfair trade in the international arena, either in the context of raw or value-added cotton.¹³ According to the NCC, the URA exempts less-developed nations from complying with certain disciplines, thus freeing them to continue export subsidies, input subsidies, and other practices, relative to cotton. The NCC is particularly concerned about the use of these trade distorting practices by Pakistan and India.

The report of the Agriculture Technical Advisory Committee (ATAC) on cotton parallels the position of the NCC.¹⁴ The ATAC report states that the URA are a positive step towards attempting to bring agricultural subsidies within the GATT framework, but stresses that subsidization is not eliminated. The ATAC report also notes that U.S. cotton farmers have consistently opposed the tariffication of section 22 quotas, but that the negotiated tariffs that would be levied on above-quota cotton should provide protection from excessive imports and are an extremely important component of the URA. Industry sources¹⁵ and the ATAC report indicate that significant increases in U.S. imports or exports of raw cotton are unlikely. Industry sources further indicate that the URA will not significantly affect U.S. export markets for raw cotton.

¹² COTNET (Cotton Council Electronic Bulletin Board), Dec. 17, 1993.

¹³ Mark D Lange, Director of Economic Services, National Cotton Council, Memphis, TN, "Strategic Outlook for U.S. Cotton," *The Cotton Gin and Oil Mill Press*, presented at the Beltwide Cotton Conference (San Diego, CA), 1994; and Mark D. Lange, USITC staff conversation, Mar. 22, 1994.

¹⁴ *Report of the Agriculture Technical Advisory Committee (ATAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

¹⁵ Officials of the National Cotton Council, the American Cotton Shippers Association, private corporations, including Monsanto, and government sources, including the Agricultural Marketing Service of the USDA, USITC staff telephone conversations, Mar.-Apr. 1994.

PART III
LIKELY IMPACT OF THE URA ON U.S.
ENERGY AND CHEMICALS SECTORS

Summary of the Likely Impact of the URA on U.S. Energy and Chemicals Sectors

- U.S. energy and chemicals sectors covered in detail in this report include energy and related products; primary aromatic chemicals and olefins; agricultural chemicals; miscellaneous finished chemical products; pharmaceuticals; rubber, plastics, and products thereof; and miscellaneous chemicals.
- U.S. energy and chemical sectors are generally highly competitive in both the U.S. and international markets.
- Tariffs on U.S. imports of energy and chemicals products are generally low. Under the Chemical Tariff Harmonization Agreement, tariffs in many developed countries will be harmonized at 0, 5.5, and 6.5 percent ad valorem for these products. In addition, tariffs on most pharmaceutical trade will be eliminated as a result of a zero-for-zero agreement.
- Although tariff reductions are the most significant Uruguay Round Agreement (URA) provision for most energy and chemicals sectors, provisions on trade-related intellectual property rights also will have a significant effect on a number of industries, including pharmaceuticals and pesticides. In the pharmaceutical sector, for example, strengthened intellectual property rights are expected to result in increased U.S. exports and provide pharmaceutical companies the opportunity to recoup a portion of their research and development expenditures.
- The likely impact of the URA on the energy and chemicals sectors generally will be positive. The impact of the URA on net trade for these sectors generally will be negligible (1 percent or less) to small (over 1 percent to 5 percent), with modest (over 5 percent to 15 percent) and sizeable (over 15 percent) increases in net trade in the miscellaneous chemicals and pharmaceutical sectors, respectively. The URA are generally expected to result in negligible to small positive increases in production and employment. The net impact on U.S. consumers likely will be positive, but negligible, resulting in lower prices and increased product diversity. Consumers of pharmaceuticals and miscellaneous chemicals will benefit by a small amount.

CHAPTER 18

Energy and Related Productsⁱ

Table 18-1
Energy and related products: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	580	570	560	-3.4
Trade data (million dollars):				
Shipments	430,648	427,401	412,851	-4.1
U.S. exports:				
Total	14,518	13,454	12,063	-16.9
GATT ² signatories	13,092	12,040	10,673	-18.5
Other	1,426	1,415	1,391	-2.5
U.S. imports:				
Total	55,313	55,192	55,905	1.1
GATT signatories	37,553	38,401	41,716	11.1
Other	17,761	16,791	14,189	-20.1
U.S. trade balance:				
Total	-40,795	-41,738	-43,832	(³)
GATT signatories	-24,461	-26,361	-31,043	(³)
Other	-16,335	-15,376	-12,698	(³)
Consumption	471,443	469,139	456,693	-3.1
Import market share (percent):				
Total	11.7	11.8	12.2	(³)
GATT signatories	8.0	8.2	9.1	(³)
Other	3.8	3.6	3.1	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.-Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) are unlikely to have more than a negligible impact (1 percent or less) on the U.S. trade balance in energy and

I The following product groups are covered in this industry sector: electrical energy; nuclear materials; coal, coke, and related chemical products; crude petroleum; petroleum products; and natural gas and components. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's

related products.³ It is estimated that there will be only a negligible impact on the U.S. domestic industries composing this sector in terms of quantity and value of shipments and employment as a result of the URA. There is unlikely to be more than a negligible positive effect on consumers of the products in this sector. No

²-Continued

sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

³ Due to the volatility of market conditions in the energy sector, effects cannot be characterized as positive or negative.

URA provisions other than tariffs are expected to have a significant effect on this sector.

The United States is a world leader in terms of both production and consumption of energy and related products; the domestic industry leads the world in terms of the technology necessary to produce the products in this sector, as well as research and development of new production technologies. Although U.S. production accounts for approximately 85 to 90 percent of domestic consumption for this sector, the United States has historically maintained a negative trade balance for many of the individual products covered in this sector. For example, although the United States is a net exporter of nuclear materials and coal, it is a net importer of electricity, crude petroleum, refined petroleum products, and natural gas.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The current average calculated tariff rates for products covered in this sector are relatively low, ranging from free to less than 1 percent ad valorem.⁴ The principal sources of total U.S. imports for this sector are Canada, Saudi Arabia, Venezuela, Nigeria, and Mexico. Most sector products will not be subject to tariff reductions under the URA because of their current duty-free status or because they are subject to tariff reduction under other trade agreements, such as the North America Free-Trade Agreement (NAFTA).⁵

The major markets for the product groups that account for most U.S. sector exports (e.g., refined petroleum products and coal and coal related products) are Canada, Japan, and Mexico. Together, these countries account for approximately 37 percent of total U.S. exports for this sector. Tariffs on these products in these nations are free or insignificant. Because most energy and related products are considered essential to a modern industrial economy, in most countries not self-sufficient in such products, moderate levels of tariffs are not a deterrent to their trade.

Other Provisions

No other URA provisions are expected to have a significant effect on this sector.

⁴ Electrical energy and natural gas already enter the U.S. market free of duty. Canada is the major U.S. market for both products because of its proximity, shared electricity transmission grids, and shared network of pipelines.

⁵ Duties for trade with Canada and Mexico will be reduced under the North American Free-Trade Agreement (NAFTA). For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

Likely Impact on U.S. Trade

Based on the Commission's sectoral model, the URA are expected to result in a negligible change in U.S. trade due to the low level of domestic and foreign tariffs. U.S. imports from both GATT and non-GATT nations may increase negligibly as a result of the URA. The principal sources of U.S. sector imports are Mexico, Canada, Japan, and the member nations of the Organization of Petroleum Exporting Countries (OPEC) (for crude petroleum and refined petroleum products).⁶ Although Canada and Japan are members of GATT, Venezuela, Kuwait, Gabon, Indonesia, and Nigeria are the only OPEC nations that are also GATT members. Saudi Arabia, the principal source of U.S. imports of crude petroleum, is not a member of GATT. No geographic shifts in trade are anticipated because the products in this sector are natural resources.

Total sector exports are expected to show only a negligible increase as a result of the URA, according to the Commission's sectoral model. U.S. exports account for only about 3 percent of total shipments in this sector; GATT markets already account for 88 percent of total U.S. sectoral exports. More than 50 percent of the total U.S. sectoral exports are petroleum products, for which the principal markets are Canada and Mexico. Japan is also a principal market for U.S. coal. Generally, the trade in this sector is dependent upon national security considerations, such as a stable source of supply, and is not impacted by tariffs.

Likely Impact on U.S. Production, Employment, and Consumers

Based on the Commission's sectoral model, the URA likely will have only a negligible effect on U.S. production as a result of the changes in tariffs. As a result, the URA are also expected to have a negligible effect on employment in the industries that compose this sector. The impact of the URA on U.S. consumers of these products is likely to be negligible but positive, due to a negligible decrease in the price of U.S. products and a small fall in the prices of GATT and non-GATT imports.

U.S. Industry Positions on the URA

The members of the Industry Sector Advisory Committee on Energy for Trade Policy Matters (ISAC 6) generally support the URA; however, there is concern among the members about the failure of U.S.

⁶ The member countries of OPEC include Algeria, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela. Ecuador officially withdrew from OPEC in Nov. 1992 but maintains observer status.

negotiators to delete an export tax rebate provision⁷ in the subsidies and countervailing agreement.⁸ The

⁷ The GATT text provides an opportunity for governments to rebate energy taxes paid on energy used, but not consumed, in the production of a good. For example, taxes paid on energy used for heat or power could be rebated once the final product is exported. ISAC 6 members state that this energy tax rebate could have a negative effect on U.S. companies in both their domestic markets and in their ability to compete in foreign markets.

⁸ *Report of the Industry Sector Advisory Committee (ISAC 6) on Energy for Trade Policy Matters on the*

provision reportedly could have serious negative consequences for U.S. companies in the domestic market and in their ability to compete with foreign companies in third markets.⁹ ISAC 6 members strongly support the elimination of the export tax rebate provision.

⁸—*Continued*

Uruguay Round of Multilateral Trade Negotiations, Jan. 11, 1994, pp. 1-5.

⁹ *Ibid.*, p. 3.

CHAPTER 19

Primary Aromatic Chemicals and Olefins¹

Table 19-1
Primary aromatic chemicals and olefins: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	8	8	8	0.0
Trade data (million dollars):				
Shipments	16,199	16,620	16,678	3.0
U.S. exports:				
Total	612	584	517	-15.5
GATT ² signatories	555	536	466	-16.0
Other	57	48	51	-10.5
U.S. imports:				
Total	403	419	396	-1.7
GATT signatories	400	419	392	-2.0
Other	3	0	4	33.3
U.S. trade balance:				
Total	209	165	121	(³)
GATT signatories	155	117	74	(³)
Other	54	48	47	(³)
Consumption	15,990	16,455	16,557	3.6
Import market share (percent):				
Total	2.5	2.5	2.4	(³)
GATT signatories	2.5	2.5	2.4	(³)
Other	(⁴)	0.0	(⁴)	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

⁴ Less than 0.05 percent.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The effect of the Uruguay Round Agreements (URA) on net trade balance, production, and employment in the chemicals and olefins sector likely

¹ The following product groups are covered in this industry sector: major primary olefins; other olefins; and primary aromatics. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's

will be positive but negligible (1 percent or less) due to tariff reductions. Most U.S. trade is with GATT countries where duty rates are low, but slightly higher than U.S. duties. A slight lowering of U.S. trading partners' duty rates should result in a modest increase (over 5 percent to 15 percent) in U.S. exports and a small increase (over 1 percent to 5 percent) in imports.

²—Continued
 sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

This will have a positive—though negligible—effect on U.S. production, employment, and consumers. No other provisions under the URA are likely to significantly impact this sector.

The United States is the leading world producer and consumer of primary aromatics and primary olefin chemicals. U.S. production accounts for over 35 percent of world production. This industrial sector is characterized by its steady improvement in capital intensive process technology that requires skilled production workers. With an estimated employment of 8,000 people, about two-thirds of whom are production workers, the industry is geographically concentrated along the Gulf Coast of Texas and Louisiana. Firms in this industry sector are located mainly in areas producing crude petroleum and natural gas (the feedstocks for primary aromatics and olefins).

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The current average calculated tariff rate for U.S. imports from GATT countries is less than 2 percent ad valorem. Duty-rate reductions for U.S. imports are to be 0.7 percentage point. Currently, tariffs in the most important GATT markets for U.S. exports generally range from free to 10 percent ad valorem. U.S. exports of alpha-olefins to Indonesia, however, face a duty rate of 30 percent ad valorem. Eleven percent of U.S. sector exports in 1993 were to the Indonesian market; seven percent were to Taiwan, a non-GATT country. Under the URA, average foreign duties are to be reduced by about 2 percentage points, to 5 percent ad valorem.

After tariff reductions under the URA, major developed GATT nations are to have the same level of tariffs on most chemical imports (either 0 percent, 5.5 percent, or 6.5 percent) under the³ Chemical Tariff Harmonization Agreement (CTHA).

Other Provisions

No other provisions under the URA are likely to significantly impact this sector.

³ Under the Chemical Tariff Harmonization Agreement (CTHA), certain tariffs in OECD countries that are above 25 percent will be reduced to 6.5 percent, with 15-year staging. Tariffs in the 10 to 25 percent range will also be lowered to 6.5 percent, in 10 years. Tariffs in the 5.5 to 10 percent range will be lowered to 5.5 percent, in 5 years. Tariffs ranging from zero to 5.5 percent will be unchanged but subject to future negotiation. The CTHA includes some safeguard provisions against large surges of imports, and provides special consideration for import-sensitive products.

Likely Impact on U.S. Trade

According to the Commission's sectoral models, the URA likely will result in a small increase in the value of imports and a modest increase in exports for an overall negligible net increase in the trade surplus. Canada and the European Union (EU) are the main sources of sector imports, followed by Korea, Brazil, and Mexico; however, imports accounted for only 2.4 percent of the domestic market in 1993. During 1993, about 45 percent of U.S. imports were from Canada and Mexico.⁴ This trading pattern and degree of market penetration for U.S. imports is unlikely to change because of the URA.

The major markets for U.S. exports are the EU and Canada, followed by Korea, Indonesia, and Mexico. During 1993, approximately 20 percent of U.S. exports were to Canada and Mexico. Small reductions in foreign duty rates should translate to a modest increase in U.S. exports during the next decade. With the possible exception of the Indonesian market, this trading pattern should remain unchanged. Although exports to Indonesia more than doubled during 1991-93, that nation bound its tariffs at the increased rate of 40 percent ad valorem for most products in this sector, making it doubtful that U.S. exports to Indonesia will continue their rapid growth.

Likely Impact on U.S. Production, Employment, and Consumers

The URA likely will have a negligible positive impact on U.S. production and employment. Increases in production and employment due to increased exports will offset decreases due to increased imports.

The impact of the URA on U.S. consumers of these products (the plastics resins and synthetic elastomers industries) is likely to be positive, but negligible, due to a negligible decrease in the price of U.S. products and a small decline in the prices of imports.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Chemicals and Allied Products for Trade Policy Matters (ISAC 3) and others stated that the United States had obtained most of its objectives and recommended support of the URA implementing

⁴ Duties for trade with Canada and Mexico will be reduced under the North American Free-Trade Agreement (NAFTA). For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

legislation.⁵ On balance, the agreements represent significant progress toward the industry's long-term goal of improving international trade rules and disciplines.

The main shortfall of the URA, according to the ISAC, is that of market access. Although the countries participating in the CTHA represent 70 percent of world trade in chemicals, many of the countries that are the industry's future growth markets are not yet participating. While this "free rider" position for developing nations is of concern, sector officials reportedly are carefully considering mechanisms that will help address this shortfall in future negotiations.⁶

⁵ The ISAC position was supported by submissions to the USITC. Milt Hunt, Hunt Consulting, Inc., official submission to USITC, Apr. 22, 1994; Timothy F. Burns, Vice President - Federal Government Relations, Chemical Manufacturers Association, official submission to USITC, May 10, 1994; W.H. Clark, Chairman, Nalco Chemical Company and Chemical Industry Trade Advisor, office of the Chemical Industry Trade Advisor, official submission to USITC, May 12, 1994.

⁶ Ibid.

Discussions with industry officials reflect a cautiously optimistic attitude towards the URA. The U.S. petrochemical industry is regarded as mature and slow-growing, with potential export growth over the next decade in the EU and Latin-American countries.⁷ The prevailing view within the industry is that more open markets will aid U.S. exports. One official noted that those GATT nations not cooperating with tariff harmonization are probably eligible for Generalized System of Preferences (GSP) treatment. It was suggested that the United States should link future GSP eligibility to cooperation on the CTHA.⁸ It was also noted that if chemical duty rates are harmonized at 6.5 percent or less, currency exchange rates become a more important factor in international trade.

⁷ Industry official, USITC staff telephone conversation, Mar. 2, 1994.

⁸ Industry representative, USITC staff telephone conversation, Mar. 23, 1994.

CHAPTER 20

Agricultural Chemicals¹

Table 20-1
Agricultural chemicals: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	57	56	56	-0.7
Trade data (million dollars):				
Shipments	17,280	17,540	17,490	1.2
U.S. exports:				
Total	4,647	4,026	3,461	-25.5
GATT ² signatories	3,373	3,178	2,999	-11.1
Other	1,274	848	463	-63.7
U.S. imports:				
Total	2,216	2,277	2,425	9.4
GATT signatories	2,118	2,171	2,253	6.4
Other	99	106	171	73.2
U.S. trade balance:				
Total	2,431	1,749	1,037	(*)
GATT signatories	1,255	1,007	745	(*)
Other	1,175	741	292	(*)
Consumption	14,849	15,791	16,453	10.8
Import market share (percent):				
Total	14.9	14.4	14.7	(*)
GATT signatories	14.3	13.7	13.7	(*)
Other	0.7	0.7	1.0	(*)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

Tariff reductions under the Uruguay Round Agreements (URA) likely will result in a small

¹ The following product groups are covered in this industry sector: fertilizer and pesticides. See app. F, vol. 11, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers

increase (over 1 percent to 5 percent) in the trade balance for the agricultural chemicals sector, resulting in negligible increases (1 percent or less) in U.S. production and employment. The agricultural chemicals sector comprises two distinct industries, fertilizers and pesticides. U.S. consumers of pesticides can expect to benefit from negligibly lower prices. Because fertilizer products currently enter the United States duty-free, U.S. consumers of fertilizers will not benefit from any U.S. tariff reductions. URA

²—Continued
(NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

provisions on trade-related intellectual property rights (TRIPs) likely will be beneficial to the U.S. pesticides industry.

Fertilizers are manufactured materials containing essential chemical elements (plant nutrients) in a plant-useable form. The commercially significant primary nutrients are nitrogen, phosphorous, and potassium. In 1992, there were approximately 600 establishments in the United States that mined and produced products used in the fertilizer industry. Fertilizers are commodity chemicals produced by capital-intensive processes. U.S. producers of primary nutrient products are, by and large, U.S.-owned chemical companies, often affiliated with energy companies. Although fertilizer companies are capital intensive, capital requirements are not considered barriers to entry. Prices are determined in efficient markets governed by world supply and demand. It is possible, however, for large producing or consuming countries to influence market prices by modifying supply or demand. Transportation, for both the raw materials and the basic compounds, is an important consideration; plant proximity to a waterway, pipeline, or major rail route is also a significant advantage.

In the aggregate, the United States is among the leading world fertilizer-producing countries, competing against Russia, China, and Canada. The United States, Morocco, and Russia are large phosphate producers; China, the United States, and Russia are large nitrogen producers; and Canada, Belarus, Russia, and Germany are large potash producers.

Place of production is often dictated by the location of the major raw materials. The largest U.S. potash deposits are in New Mexico. The primary feed stock for nitrogen products is natural gas; as a consequence, much of U.S. synthetic ammonia is produced in States having abundant natural gas supplies, such as Louisiana and Texas. The major U.S. phosphate fertilizer production facilities are near phosphate rock mines in Florida, North Carolina, and western areas such as Idaho and Utah.

Pesticides are any substances, organic or inorganic, used to destroy or inhibit the action of plant or animal pests. Pesticide producers are often part of large, vertically integrated, multinational, multiproduct companies, with production sites both in their home countries and throughout the world. In 1992, there were approximately 120 companies in the United States that manufactured active ingredients (AI) and formulations. AI production techniques are relatively capital intensive, usually having individual process requirements. Specific pesticide AIs may be produced in large quantities at one location and then shipped throughout the world for formulation and distribution. However, geography imposes no real strategic or financial constraint to AI plant location.

When ranked by sales, the three major producing areas in the world—Europe, the United States, and Japan—are also the major consuming areas. Of the largest pesticide companies in the world, in 1990, 13

were based in the United States, 13 were based in Europe, and 11 were based in Japan. Japanese companies sell mainly in the Far East, while U.S. and European companies are more worldwide in their scope. Since the dominant pesticide consumer is commercial agriculture, aggregate demand is strongly influenced by conditions in the farming community, primarily planted acreage, weather, and farm income.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The trade-weighted average U.S. tariff on agricultural chemicals is to fall from 2.8 percent to 1.8 percent. This drop is due entirely to pesticides, for which trade-weighted ad valorem equivalents are to drop 4 percentage points, from 10 to 6 percent. GATT-country most-favored-nation (MFN) tariff rates for pesticides generally average from 8 to 12 percent, with reduction offers amounting to 4 percentage points. All fertilizer products entering the United States from countries with MFN trade status are free of duty.

Other Provisions

No other URA provisions will significantly benefit the fertilizer industry. However, the agreement on TRIPs³ likely will be beneficial to firms producing pesticides covered by patents. These benefits appear to be both country- and product-specific for U.S. pesticide companies operating overseas. In addition, U.S. companies often produce overseas for sale overseas, and therefore, the TRIPs agreement should positively affect U.S. revenues other than export revenues.

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the net effect of the URA likely will be a small increase in net trade, as a small increase in overall sector exports is less than completely offset by a small increase in imports of pesticides.⁴ Inasmuch as U.S. tariffs are

³ Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex IC, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope, and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

⁴ Tariff effects exclude U.S. pesticide exports to Canada and Mexico, which accounted for 22 percent of total exports in 1993, and imports of pesticides from

already zero for fertilizers, no increase in imports of fertilizers is anticipated as a result of the URA.

International trade in pesticides, particularly in newer, patented products, is likely to take place among GATT countries. As product patents expire, pesticides are more likely to be traded with, and produced in, the larger non-GATT countries, such as China and the countries of the former Soviet Union. Since so much pesticide production is carried out by large multinational companies headquartered in GATT countries, there is likely to be some production shifting within GATT countries and perhaps to some non-GATT countries. However, increases in production by national companies in non-GATT countries are likely to be minimal and concentrated in off-patent products.

Likely Impact on U.S. Production, Employment, and Consumers

The small increase in net trade likely will translate to a negligible increase in production and employment

⁴—Continued
Canada (\$50 million in 1993). Also excluded are exports to non-GATT nations that accounted for about 13 percent of U.S. exports in 1993. Duties for trade with Canada and Mexico will be reduced under the North American Free-Trade Agreement (NAFTA). For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

⁵ The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

for the sector. In the case of fertilizers, this will be due solely to increases in exports; imports will remain unchanged by the URA and therefore, consumers of fertilizers should experience no change in prices. Pesticide imports should increase; pesticide exports should increase by an even larger amount. Since pesticide active ingredients are usually made under conditions of increasing returns to scale, increased U.S. demand should have little impact on U.S. employment. Furthermore, since most U.S. pesticide production is by large multinational companies, any related employment increases likely will come from restructuring within the companies, rather than regional shifting in either production or employment. The URA likely will prompt a negligible price reduction for the U.S. pesticide consumer.

U.S. Industry Positions on the URA

The industries in this sector are generally supportive of the URA. However, representatives of this sector have expressed concern about "free rider" countries. According to industry representatives, these countries, most of which are developing countries, are starting to back away from the proposed tariff offers.^{6,7} Another industry representative suggested that participation in the Chemical Tariff Harmonization Agreement be required of new members of the World Trade Organization.⁸

⁶ Milton Hunt, Agrochemical Sector representative to Industry Sector Advisory Committee on Chemicals and Allied Products for Trade Policy Matters (ISAC 3), official submission to USITC, Apr. 22, 1994.

⁷ Chemical Manufacturers Association, official submission to USITC, May 10, 1994.

⁸ **W.H.** Clark, Chemical Industry Trade Advisor, Office of the Chemical Industry Trade Advisor, official submission to USITC, May 12, 1994.

CHAPTER 21

Miscellaneous Finished Chemical Products ^{1,2}

Table 21-1
Miscellaneous finished chemical products: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	267	267	267	0
Trade data (million dollars):				
Shipments	70,415	72,540	73,811	4.8
U.S. exports:				
Total	4,698	5,278	5,789	23.2
GATT ² signatories	4,258	4,732	5,241	23.1
Other	440	546	548	24.5
U.S. imports:				
Total	3,386	3,952	4,231	25.0
GATT signatories	3,195	3,716	3,971	24.3
Other	191	237	260	35.7
U.S. trade balance:				
Total	1,312	1,325	1,558	(³)
GATT signatories	1,063	1,016	1,270	(³)
Other	249	309	288	(³)
Consumption	69,103	71,214	72,253	4.6
Import market share (percent):				
Total	4.9	5.6	5.9	(³)
GATT signatories	4.6	5.2	5.5	(³)
Other	0.2	0.3	0.4	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis ³ and U.S. Competitive Position

The Uruguay Round Agreements (URA) are likely to result in small positive effects (over 1 percent to 5

I The following product groups are covered in this industry sector: paints, inks, and related items and certain components thereof; synthetic organic pigments, synthetic dyes, and couplers; synthetic tanning agents; synthetic tanning and dyeing materials; photographic chemicals and preparations; adhesives and glues; perfumes, cosmetics, and toiletries; soaps, detergents, and surface-active agents; and explosives and propellant powders. See app. F, vol. II, for trade tables for this sector and these groups.

percent) on the trade balance for miscellaneous finished chemical products, and negligible positive effects (1 percent or less) on U.S. production, employment, and consumers in this sector. Few

² Miscellaneous finished chemical products are distinct from miscellaneous chemicals, which are discussed in ch. 24.

³ Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

geographic shifts are expected, primarily because of the small tariff reductions, the well-established nature of producers, and the mature status of most of the industries included in the miscellaneous chemical products sector. No URA provisions other than tariff reductions are likely to significantly impact this sector.

The United States is the world's largest producer of most of the products in this sector. However, most developed nations commonly produce these products in sufficient quantity to meet their internal demand. In addition, large multinational companies often produce these items in one location to serve regional geographic markets, because transportation costs for some products are relatively high.

U.S. producers' shipments, estimated to be nearly \$74 billion in 1993, accounted for approximately 94 percent of U.S. consumption. Most U.S. sector imports are generally sourced from producers located in developed nations and are items that are not produced domestically. In turn, a significant share of U.S. exports also represent production from multinational producers' facilities in the United States that are designed to serve international or regional markets.

Because the process technologies involved in production of many of the products included in this industry sector are neither proprietary nor technologically difficult, it is relatively simple for developing nations to establish such industries. However, in seeking to expand into larger multinational or regional markets, small producers must compete against large multinational companies that typically enjoy significant competitive advantages based on their experience and very large economies of scale. There are, however, regional production concentrations in certain small industry subsectors. For example, the high-value-added fragrance and perfume producers remain based in France, in part because of industry tradition and in part because of the general availability of certain ingredients.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The current average calculated tariff rate for U.S. sector imports is approximately 7.4 percent ad valorem. Under the URA, this duty is to be reduced an average of 3.8 percentage points, with various products subject to reductions under the Chemical Tariff Harmonization Agreement (CTHA).⁴ Among the

⁴ Under the Chemical Tariff Harmonization Agreement (CTHA), certain tariffs in most Organization for Economic Cooperation and Development (OECD) countries that are above 25 percent will be reduced to 6.5 percent, with 15-year staging. Tariffs in the 10 to 25 percent range will also be lowered to 5.5 percent, in 5 years. Tariffs ranging from zero to 5.5 percent will be unchanged but subject to

product groupings included in this sector, synthetic organic pigments and synthetic dyes account for the highest current effective duty rates, approximately 16.1 and 14.3 percent ad valorem, respectively. These two product groupings account for approximately 21 percent of the total value of imports in this industry sector.

The industry segment with the largest value of imports is the perfumes, cosmetics, and toiletries segment, which alone accounts for 23 percent of total sector imports. The current calculated duty rate for this product grouping is approximately 5.0 percent ad valorem. The most significant negotiated decreases in domestic tariff rates are in this group; offered tariff reductions range from 0.7 to 5.0 percent ad valorem.

Canada, Mexico, the European Union (EU), and Japan are the major GATT markets for U.S. exports of certain miscellaneous chemical products. Tariff rates are generally very low, and are comparable in most cases with U.S. tariffs. Moreover, tariff rates between the United States, Canada and Mexico will be reduced under the North American Free-Trade Agreement (NAFTA); about 36 percent of U.S. sector exports went to Canada and Mexico in 1993. The next several largest markets for U.S. products within this industry sector are developed countries in Western Europe and Eastern Asia; exports of sector products into these markets consist of materials that are not readily available from these nations' domestic sources, or may represent trade both among and between multinational producers in the United States and other nations. Foreign tariffs are also to be reduced by an average of about 4 percentage points under the terms of the CTHA.

Other Provisions

No other URA provisions are likely to significantly impact this sector.

Likely Impact on U.S. Trade

Overall, a small positive change in the net trade balance should result from changes associated with the URA provisions. According to the Commission's sectoral model, imports likely will increase by a small amount. The U.S. industry currently supplies approximately 94 percent of the domestic demand for products in this sector, with the remainder accounted for by imports. However, as noted previously, a significant share of the imports are goods that do not compete directly with domestically produced goods. No shift in sourcing of U.S. imports is anticipated.

U.S. exports are expected to experience only a small increase, as markets for the products in this sector are already defined by factors other than tariffs, such as high transportation costs.

⁴—Continued
future negotiation. The CTHA includes some safeguard provisions against large surges of imports, and provides special consideration for import-sensitive products.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral models, the URA are likely to result in a negligible but positive increase in U.S. production and employment due to increased exports. The impact of the URA on U.S. consumers of the products in this sector is likely to be negligible, due to negligible decreases in the price of U.S. and imported products.

U.S. Industry Positions on the URA

The U.S. chemical industry is represented by the Industry Sector Advisory Committee on Chemicals and Allied Products (ISAC 3). The ISAC considered the following issues to be priorities in the URA negotiations: improved market access (through reduction of both tariff and nontariff measures), minimizing the "free rider" problem, improved intellectual property protection, improvements in the subsidy and dumping codes, and improved disciplines for preshipment inspections. Although final comments

and positions on the URA have not yet been made by the industry, preliminary support has been expressed for certain areas covered by the URA, notably those involving nontariff measures, preshipment inspection, rules of origin, standards (i.e., technical barriers to trade), import licensing, and trade-related intellectual property rights and investment measures. Support for other areas of the URA has been withheld pending implementing legislation. These areas include market access (tariffs), antidumping, and subsidies and countervailing measures.⁵

In addition, the Chemical Industry Trade Advisor, the Chemical Manufacturers Association, and Hunt Consulting, Inc., all support the URA, although each voiced concerns about market access and the limits in coverage of the agreements. According to all three, many of the industry's future growth markets are not participating in the URA.⁶

⁵ Chemical & Engineering News, Jan. 4, 1994.

⁶ Milt Hunt, Hunt Consulting, Inc., official submission to U.S. International Trade Commission (USITC), Apr. 22, 1994; Timothy F. Burns, Vice President - Federal Government Relations, Chemical Manufacturers Association, official submission to USITC, May 10, 1994; and W.H. Clark, Chairman, Nalco Chemical Company and Chemical Industry Trade Advisor, Office of the Chemical Industry Trade Advisor, official submission to USITC, May 12, 1994.

CHAPTER 22

Pharmaceuticals¹

Table 22-1
Pharmaceuticals: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	188	191	197	4.8
Trade data (million dollars):				
Shipments	51,880	55,607	58,428	12.6
U.S. exports:				
Total	5,838	6,816	7,270	24.5
GATT ² signatories	5,557	6,512	6,970	25.4
Other	281	304	300	6.6
U.S. imports:				
Total	4,904	6,026	6,123	24.8
GATT signatories	4,470	5,518	5,786	29.4
Other	434	509	337	-22.3
U.S. trade balance:				
Total	934	790	1,147	(³)
GATT signatories	1,087	994	1,185	(³)
Other	-153	-204	-37	(³)
Consumption	50,946	54,817	57,281	12.4
Import market share (percent):				
Total	9.6	11.0	10.7	(³)
GATT signatories	8.8	10.1	10.1	(³)
Other	0.9	0.9	0.6	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The pharmaceutical sector likely will experience a net positive impact as a result of the Uruguay Round Agreements (URA). Benefits to the industry are likely

¹ The following product groups are covered in the discussion of this industry sector: antibiotics and other medicinal chemicals. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to

to include a sizeable (over 15 percent) positive net change in U.S. trade and a small (over 1 percent to 5 percent) increase in production and employment. The effects of tariff reductions are likely to be enhanced by increased intellectual property rights protection under the Trade-Related Aspects of Intellectual Property Rights Agreement (TRIPs). Benefits to U.S. consumers are likely to be more indirect, as companies use increased revenues to, among other things, lower domestic production costs and/or expand research and development (R&D) efforts.

²—Continued
reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

The U.S. pharmaceutical industry is multinational in character, highly regulated, capital intensive, driven by large R&D expenditures, and generally utilizing state-of-the-art technology.³ In 1993, the U.S. industry accounted for about \$85 billion of the \$187 billion world market for ethical pharmaceuticals, with about 68 percent of its sales concentrated in the United States.⁴ About 80 firms worldwide account for over 75 percent of global sales.

On a worldwide basis, the top three companies in 1993 in terms of ethical drug sales were Merck (United States, \$9 billion in sales), Glaxo Holdings (United Kingdom, \$8 billion), and Bristol-Myers Squibb (United States, \$6 billion).⁵ During 1990-93, 9 of the top 20 firms worldwide were based in the United States.⁶ Moreover, the United States has been a leader during the past decade in successfully producing global pharmaceuticals? One reason for the U.S. industry's continued strong position in the world market is its level of innovation, which, in turn, is based on a number of factors, including the domestic industry's continuing commitment to high R&D expenditures. The U.S. industry, which spent almost \$13 billion on R&D in 1993, routinely allocates approximately 17 percent of its revenues from sales of ethical pharmaceuticals to R&D, or approximately three times the level allocated by the remainder of the chemical and related-industries sector.⁸ In comparison, the global industry spent approximately \$42 billion on R&D in 1993.

During 1976-93, the estimated cost of developing a pharmaceutical product in the United States increased from \$54 million to over \$231 million.⁹ Given the

³ For the purposes of this report, the "U.S. industry" is defined to include U.S. subsidiaries of foreign-based firms.

⁴ Ethical pharmaceutical products are those products distributed by prescription rather than on an "over-the-counter" (OTC) basis. Industry sources estimate that domestic sales of OTC products by U.S. firms were valued at approximately \$13 billion in 1991.

⁵ According to the Wood MacKenzie rankings.

⁶ Within the United States, pharmaceutical firms are generally concentrated geographically on the East Coast (primarily New York, New Jersey, and Pennsylvania), in certain mid-Western states, and in California.

⁷ A global pharmaceutical is defined as one that is eventually marketed in the following seven major industrialized countries: France, Germany, Japan, Italy, Switzerland, the United Kingdom, and the United States.

⁸ "Chemical Industry Spending to Rise Modestly," *Chemical & Engineering News*, Jan. 25, 1993, p. 10.

⁹ Joseph A. DiMasi, Ronald W. Hansen, Henry G. Grabowski, and Louis Lasagna, "The Cost of Innovation In The Pharmaceutical Industry," *Journal of Health Economics*, vol. 10, No. 2, July 1991, pp. 107-142; and Office of Technology Assessment, *Pharmaceutical R&D: Costs, Risks, and Rewards*, Feb. 1993, p. 16. This amount includes the direct costs associated with bringing the drug through discovery, clinical testing, development, and marketing approval, as well as the cost of capital. It should be noted that the values for 1976 and 1993 in constant (1982) dollars are \$86 million and \$197 million, respectively.

magnitude of these costs, TRIPs have a significant impact on the development of pharmaceuticals, since they allow innovative firms a period of market exclusivity in which the firms can partially recoup R&D expenditures. It reportedly takes about 19 years for the average new pharmaceutical product to recover its R&D investment in the United States. A lack of adequate patent protection in many foreign countries can erode a product's lifetime, thereby causing a company substantial losses in revenue.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The general rates of duty for pharmaceutical imports in many developed countries are similar to or lower than the current average calculated tariff rate of 4.8 percent ad valorem for U.S. imports of pharmaceuticals. In some cases, the reductions have been the result of free-trade agreements with countries or within regions.¹⁰

The rates of duty in other geographical areas that are not parties to free-trade agreements with the United States vary. In the European Union (EU), for example, the general rates of duty for pharmaceuticals average between 3 and 7 percent ad valorem. Japan unilaterally instituted a temporary schedule in recent years that includes rates of duty that are lower than those in its GATT schedule. Under the temporary schedule, which is reviewed every year on March 31 (the end of the Japanese fiscal year), the rates of duty for many of these products range from zero to 3 percent ad valorem.

Under the provisions of the GATT zero-for-zero initiative on pharmaceuticals, however, both U.S. and foreign duties are to be eliminated for pharmaceuticals with an International Non-Proprietary Name (INN), whether in bulk or dosage form, and for certain intermediate chemical products (used primarily in the production of pharmaceuticals).¹¹ Duties on all imports of hormones, vitamins, alkaloids, and antibiotics, whether in bulk or dosage form, are also to be reduced to zero. This provision will affect the majority of pharmaceuticals imported by the United States.

¹⁰ The duty rates on most pharmaceuticals imported from Canada and Mexico, for example, have either approached zero under the United States-Canada Free-Trade Agreement or are subject to continuously staged reductions to zero under the North American Free-Trade Agreement (NAFTA). Similarly, all pharmaceuticals imported from Israel will enter free of duty as of January 1, 1995.

¹¹ International non-proprietary names are granted by the World Health Organization.

Other Provisions

The TRIPs agreement¹² likely will have a significant effect on the pharmaceuticals sector. Some of the major provisions of the TRIPs agreement are limitations on compulsory licensing and strict enforcement of intellectual property rights. However, TRIPs does not provide "pipeline" protection for pharmaceuticals in the research, development, and regulatory process and implementation will be delayed in some less-developed countries.¹³

Likely Impact on U.S. Trade

The global pharmaceutical industry transcends geographical barriers in that major firms are multinational, with operations in the United States, Western Europe, Japan, and other markets worldwide. The distinctions of geographical boundaries have been further blurred by recent mergers in the industry that have created "transnational" entities. As such, given the relatively high degree of related party trade among the multinational companies, resulting from the proprietary nature of many of the products under consideration, it is difficult to meaningfully interpret the impact on trade from specific geographical areas. However, according to the Commission's sectoral model, tariff changes under the URA are likely to result in a modest positive net change in U.S. pharmaceutical trade with small increases in the value of both U.S. imports and U.S. exports of pharmaceuticals.¹⁴ The increase in U.S. exports is likely to be further enhanced as a result of the strengthening of TRIPs provisions for GAIT signatories, potentially resulting in a sizeable (over 15 percent) positive net change in trade.

¹² Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex IC, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope, and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

¹³ "Pipeline" protection refers to protecting products that have been patented in one country, but not yet marketed in another country *where* there has been no product patent protection for the products.

¹⁴ According to some industry representatives, the liberalization of trade under the URA is likely to provide a win-win situation for everyone.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, expected changes in U.S. trade resulting from tariff reductions likely will have a negligible positive impact (1 percent or less) on U.S. production and employment. If projected increases in U.S. exports resulting from the TRIPs agreement are considered, it is likely that U.S. production and employment would increase by small amounts.

Duty elimination will also lead to a small cost savings, indirectly benefitting consumers. Many companies likely would use the potential cost savings primarily to offset the cost of other inputs and to lower domestic production costs. This lowering of costs would allow resources to be shifted and used for, among other applications, the expansion of research and manufacturing facilities. The reduction in costs would also enable companies to better control the cost of pharmaceuticals to the consumer. In addition, the expansion of R&D efforts is likely to result in the development of more new products and more varieties of older products.¹⁵

U.S. Industry Positions on the URA

The Pharmaceutical Manufacturers Association (PMA) supports U.S. implementation of the URA, provided that the United States will vigorously pursue other efforts to improve intellectual property protection for pharmaceuticals in developing countries during the implementation period contained in the TRIPs agreement.¹⁶ PMA states that while working with U.S. representatives during the negotiations, it identified TRIPs and the zero-for-zero initiative on pharmaceuticals as significant provisions for the sector.¹⁷

PMA believes that the TRIPs agreement has many positive features. According to PMA, the substantive provisions of TRIPs will provide several key benefits to the industry by providing pharmaceutical patent protection in all GAIT-member states. PMA believes that protection of pharmaceutical patents will have the

¹⁵ Representatives of several pharmaceutical companies, U.S. International Trade Commission (USITC) staff telephone interviews, Mar. 30, 1994.

¹⁶ Pharmaceutical Manufacturers Association (PMA) (Washington, DC), official submission to USITC, Mar. 7, 1994.

¹⁷ Representatives of several companies in the pharmaceutical sector indicated their agreement with the PMA position in USITC staff telephone interviews, Apr. 1994.

additional effect of encouraging investment in R&D, thereby benefitting patients worldwide.

PMA expressed concern, however, that the TRIPs agreement is not as strong as more recent bilateral intellectual property agreements, such as those in the North American Free-Trade Agreement (NAFTA). PMA cites the 10-year delay in patent protection and the lack of "pipeline" coverage as reasons that the provision will not significantly benefit the international research-based pharmaceutical industry in many rapidly growing markets in Asia, Africa, and Latin America until at least 2005. Although the transition

period for developed and some developing countries ranges from 1 to 5 years, the transition period for developing countries that currently lack adequate patent protection is 10 years. According to PMA, this 10-year implementation period includes an extra 5 years of delay that discriminates against pharmaceuticals. With regard to coverage for biotechnology-derived products, PMA expressed concern about a TRIPs provision that would allow GATT signatories to exclude from patentability plant and animal varieties other than microorganisms, an exclusion that could have significant adverse effects on biotechnology-derived products.

CHAPTER 23

Rubber, Plastics, and Products Thereof

Table 23-1
Rubber, plastics, and products thereof: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	955	962	974	2.0
Trade data (million dollars):				
Shipments	138,925	140,550	145,439	4.7
U.S. exports:				
Total	15,721	6,495	17,282	9.9
GATT ² signatories	14,389	15,339	16,077	11.7
Other	1,332	1,156	1,205	-9.6
U.S. imports:				
Total	11,186	12,692	14,082	25.9
GATT signatories	9,457	10,667	11,899	25.8
Other	1,729	2,025	2,183	26.3
U.S. trade balance:				
Total	4,535	3,803	3,200	(³)
GATT signatories	4,932	4,672	4,178	(³)
Other	-397	-869	-978	(³)
Consumption	134,390	136,747	142,239	5.8
Import market share (percent):				
Total	8.3	9.3	9.9	(³)
GATT signatories	7.0	7.8	8.4	(³)
Other	1.3	1.5	1.5	(³)

¹ Shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Employment data compiled from official statistics of the U.S. Bureau of Labor Statistics; all other data compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) are likely to have a negligible (1 percent or less) but positive

¹ The following product groups are covered in the discussion of this industry sector: polyethylene resins in primary forms; polypropylene resins in primary forms; PVC resins in primary forms; styrene polymers in primary forms; saturated polyester resins; other plastics in primary forms; SBR rubber in primary forms; other synthetic rubber; pneumatic tires and tubes; other tires; plastic or rubber in semifabricated forms; plastic containers and

effect on the U.S. trade balance for rubber, plastics, and related products, given the small changes in tariff rates for sector products and limited market access

¹—Continued

closures; hose, belting, and plastic pipe; miscellaneous rubber or plastics products; and natural rubber. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

improvements. Effects on U.S. production, employment, and consumers are also expected to be positive but negligible. No URA provisions other than tariff reductions are likely to significantly affect this sector.

The U.S. plastics, rubber, and related products sector is one of the world's largest and most competitive. World leadership in plastics raw material production is held by the United States, which produced approximately 103 million metric tons in 1993, or 30 percent of world demand. Compared with the U.S. plastics industry, the European Union (EU) plastics industry is about the same size, while Japan's industry is about half as large. The United States is also the world's largest producer of synthetic rubber, with 25 percent (9.5 million metric tons) of 1992 world production, and leads the world in production of many fabricated products contained in this segment, most notably pneumatic tires.

The competitiveness of this sector in the world market is further demonstrated by the substantial trade surplus of \$3.2 billion generated by this sector. Almost every industry is a net exporter of goods, with the exception of natural rubber and certain fabricated plastic and rubber product categories (tires and miscellaneous products).

Technological expertise in this sector is dominated by the United States, Japan, and the EU. Many U.S. firms license production technology to other areas of the world. One source reports that the United States is the world's most efficient processor of petrochemicals to chemical products.³

Regional distribution of the manufacturers of the plastic raw materials and synthetic rubber is heavily concentrated in the States of Texas and Louisiana, where the location of petrochemical feedstocks is most prevalent. Location of fabricated products producers is more widespread; manufacturers are located throughout the United States with few regional concentrations.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The current average calculated U.S. tariff rate for this sector is 4.1 percent ad valorem, which is to be reduced under the URA to 3.6 percent. The ad valorem tariff levels for this sector as a whole are diverse, with current tariffs ranging from free to 16 percent. Most plastic raw materials have tariffs between 6 and 12.5 percent, while natural and synthetic rubber enter duty

³ Industry representative, U.S. International Trade Commission (USITC) staff telephone conversation, Mar. 24, 1994.

free. Fabricated rubber and plastic product tariffs typically range from 3 to 8.5 percent. Most U.S. tariff concessions are for products that presently have duty rates greater than 6.5 percent; these tariffs are to be reduced to 6.5 percent under the Chemical Tariff Harmonization Agreement (CTHA).⁴ In addition, new tariff classifications and duty rates of zero have been assigned for a few products that have been the subject of proposed duty-suspension legislation; these items represent a negligible amount of trade for this sector.

Japan and the EU, both major competitors in this sector, have agreed to reduce their tariffs 2 and 3.4 percentage points, respectively, for plastic materials, and 0.91 and 1.04 percentage points, respectively, for rubber materials. Of more importance to many U.S. manufacturers are the proposed tariff reductions for other countries, particularly a number of developing countries; these countries have the greatest growth potential for U.S. exports. For purposes of comparison, three categories of tariff offers will be discussed: (1) countries whose tariff offers are lower than current levels and approximate those of the United States, Japan, and the EU; (2) countries whose tariff offers are lower than current levels but remain significantly higher than those of the United States, Japan, and EU; and (3) countries that have proposed increases in tariffs from the current rates.

Australian and Korean tariff offers for this sector have generally been lowered to levels equivalent to the current U.S., Japanese, and EU rates. Previously ranging from 20 to 30 percent for most items, Korean tariff rates are proposed to be lowered to 7 percent for plastic materials and 13 percent for rubber materials. Australian tariff offers are also reported to drop significantly, from approximately 25 to 15 percent; however, a few products retain extremely high tariffs of greater than 80 percent.

Chile, India, Brazil, and Thailand have agreed to reduce tariffs under the URA offer but most remain very high compared to U.S., Japanese, and EU offers. Chile's current tariff rates will be reduced by 3 percentage points to 32 percent ad valorem for the entire range of products covered in this sector. India's tariffs are currently about 100 percent for most products in this sector; under the URA many are to be reduced to 40 percent, but a substantial amount of products retain the 100-percent tariff.⁵ The majority of

⁴ Under the Chemical Tariff Harmonization Agreement (CTHA), certain tariffs in most Organization for Economic Cooperation and Development (OECD) countries that are above 25 percent will be reduced to 6.5 percent, with 15-year staging. Tariffs in the 10 to 25 percent range will also be lowered to 6.5 percent, in 10 years. Tariffs in the 5.5 to 10 percent range will be lowered to 5.5 percent, in 5 years. Tariffs ranging from zero to 5.5 percent will be unchanged but subject to future negotiation. The CTHA includes some safeguard provisions against large surges of imports, and provides special consideration for import-sensitive products.

⁵ The majority of these tariffs that remain at 100 percent are for fabricated rubber and plastics products.

Brazil's tariffs currently range between 40 and 65 percent; under the URA, most are to be reduced to between 20 and 25 percent. Current tariff rates for plastic materials in Thailand range between 40 and 60 percent, while those for rubber materials range between 30 and 50 percent. Thailand has agreed to reduce most tariffs on plastic material to 30 percent, while rubber material tariffs remain virtually unchanged. However, natural rubber and a few other plastics materials have duty-free status, which they will retain.

Indonesia, Argentina, and Venezuela all proposed binding tariff rates that, on average, are higher than current effective non-bound tariff levels. Currently ranging from 5 to 40 percent, Indonesian tariffs are proposed to be bound at 40 percent for most products in this sector. Argentina's current applied tariffs range from 10 to 38 percent. Under the URA, all Argentine tariffs for this sector are to be bound at 23 or 35 percent. Venezuela's tariffs are proposed to be bound at 30, 35, or 40 percent under the URA, compared to current applied rates ranging from 5 to 30 percent.

Other Provisions

No other URA provisions are likely to significantly impact this sector.

Likely Impact on U.S. Trade

The positive U.S. trade balance for this sector is likely to increase negligibly as a result of the URA. Major U.S. trading partners for sector products are Canada, Japan, Mexico, the EU, China, and Taiwan.⁶ According to the Commission's sectoral model, U.S. imports are projected to increase negligibly, because the United States has some of the world's lowest tariffs on these products already, and the average trade-weighted tariff rate reduction for the sector is 0.4 percentage point.

U.S. exports of products contained in this sector may experience a small increase (over 1 percent to 5 percent) under the URA, according to the Commission's sectoral model. Approximately 42 percent of U.S. exports in 1993 were to Canada and Mexico and 7 percent to non-GATT countries. The major regions of growth for U.S. exports of these products are developing countries (including non-GATT countries) that generally retain substantial tariffs under the URA offer. Because many tariff barriers will remain in place or be bound above current

⁶ Thirty percent of U.S. imports in 1993 were from Canada and Mexico. Duties for imports from these countries will be eliminated under the North American Free-Trade Agreement (NAFTA). For more information, see USITC, *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

effective tariff levels in many high-growth markets, the export potential for U.S. industries may be mitigated.

Likely Impact of U.S. Production, Employment, and Consumers

The overall impact of the URA on U.S. production, employment, and consumers for this sector is positive, but negligible, according to the Commission's sectoral model. Domestic prices may decline negligibly, possibly benefitting consumers.

The U.S. plastics raw materials and synthetic rubber industries are competitive global industries, consisting mainly of multinational companies that have plants, operations, and technology throughout the world. Many companies in this sector are likely to conduct operations in areas of the world where a competitive edge can be gained. The URA will not substantially alter these conditions.

U.S. Industry Position on the URA

The rubber and plastics industry sector has generally supported the URA.⁷ However, there are some concerns expressed by the industry with regard to market access in Latin American and Asian countries that have relatively high tariffs and the "free rider" problem.⁸ No provisions or agreements have been reached with many of these countries to harmonize their tariff levels to U.S., Japanese, and EU levels. Industry officials also reported that the URA should pursue a level playing field for U.S. products. This includes the reduction of tariffs to levels no higher than U.S. levels and eradicating nontariff barriers to trade.

Since this sector includes a wide variety of industries with different levels of tariff reduction, some have responded that the URA will have a positive trade effect on the industry, while others have responded that the agreement will harm their industry. The overall view is that exports may increase, although imports are not likely to be affected.

⁷ Information for this section of the report was obtained from interviews from industry associations, Industry Sector Advisory committee (ISAC) reports; the Chemical Manufacturers Association, official submission to USITC, May 10, 1994; and company interviews. Industry sectors contacted include the plastic raw materials producers, rubber industry, floor covering industry, film industry, pressure sensitive tape industry, and the plastic packaging industry.

⁸ W.H. Clark, Chairman, Nalco Chemical Company, and Chemical Industry Trade Advisor, Office of the Chemical Industry Trade Advisor, (an industry coalition that includes the Society of the Plastics Industry), official submission to USITC, May 12, 1994, states that "the main shortfall is the market access area...many of the countries which are the industry's future growth markets are not yet participating."

⁹ Peter J. Pantuso, Vice President - Public Affairs, Rubber Manufacturers Association, official submission to USITC, Mar. 31, 1994.

CHAPTER 24

Miscellaneous Chemicals¹

Table 24-1
Miscellaneous chemicals: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	268	264	259	-3.4
Trade data (million dollars):				
Shipments	76,888	76,567	76,561	0.4
U.S. exports:				
Total	15,123	15,372	15,662	3.6
GATT ² signatories	13,372	13,727	13,919	4.1
Other	1,751	1,645	1,743	0.5
U.S. imports:				
Total	9,540	10,282	10,532	10.4
GATT signatories	9,162	9,879	10,043	9.6
Other	378	403	489	29.3
U.S. trade balance:				
Total	5,582	5,090	5,130	(³)
GATT signatories	4,209	3,848	3,876	
Other	1,373	1,242	1,254	
Consumption	71,305	71,477	71,477	0.2
Import market share (percent):				
Total	13.4	14.4	14.7	(³)
GATT signatories	12.8	13.8	14.1	(³)
Other	0.5	0.6	0.7	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

It is estimated that the Uruguay Round Agreements (URA) will result in a modest increase (over 5 percent

¹ The following product groups are covered in this sector: benzenoid commodity chemicals, benzenoid specialty chemicals, miscellaneous organic chemicals, selected inorganic chemicals and elements, inorganic acids, salts and other inorganic chemicals, chlor-alkali chemicals, industrial gases, essential oils and other flavoring materials, miscellaneous chemicals and

to 15 percent) in the U.S. trade balance for the miscellaneous chemicals sector, primarily because of tariff reductions. U.S. exports of miscellaneous chemicals are nearly 50 percent greater than U.S.

¹—Continued specialties, and gelatin. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

imports; the net trade balance in 1993 was \$5.1 billion. The effect on U.S. production and employment will be a small increase (over 1 percent to 5 percent) and consumers will also benefit to a small degree. In addition to tariff provisions of the URA, trade-related investment measures (TRIMs), rules of origin, and preshipment inspections will affect this sector.

The miscellaneous chemicals sector comprises mostly chemical intermediates that are further reacted to produce plastics, synthetic fibers, pharmaceuticals, detergents, paint components, and many other products. Other uses include additives in food products and plastics, automobile antifreeze, refrigerants, sterilizing agents, and solvents. Since the end of World War II, the United States has led the world technologically in this sector.

Production of miscellaneous chemicals is overwhelmingly concentrated in Texas and Louisiana. Other producing States are New Jersey, Illinois, Tennessee (inorganic chemicals only), and Ohio (organic chemicals only).

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The current average U.S. duty rate (calculated for 1993 imports excluding Canada and Mexico) for miscellaneous chemicals is 5.5 percent ad valorem. Tariffs range from only 0.08 percent for chlor-alkali inorganic chemicals to nearly 12 percent ad valorem for benzenoid specialty organic chemicals. Duties for other segments of this group range from 1.1 to 8.8 percent.

Tariffs faced by U.S. exports are generally higher than U.S. tariffs, especially in less developed and newly industrialized countries. The current bound tariff rates in most of these countries range from 40 to 80 percent. India's tariffs exceed 100 percent in most cases, although their current applied rates are lower than the bound rates.

Under the URA, the United States and most industrialized countries, except Australia and New Zealand, agreed to participate in the Chemical Tariff Harmonization Agreement (CTHA), which will reduce almost all chemical duty rates to no more than 6.5 percent.⁴ However, certain important less developed and newly industrialized countries did not agree to participate fully in CTHA, committing themselves only

³ Max Turnipseed, chairman of Industry Sector Advisory Committee on Chemicals and Allied Products for Trade Policy (ISAC 3), official submission to U.S. International Trade Commission (USITC), Mar. 30, 1994.

⁴ Under the Chemical Tariff Harmonization Agreement (CTHA), certain tariff in most Organization for Economic Cooperation and Development (OECD) countries that are above 25 percent will be reduced to 6.5 percent, with

to bind tariffs at higher levels, ranging from 15 to 40 percent.⁵

Overall, under the CTHA the United States has agreed to lower its tariffs on miscellaneous chemicals by about 42 percent, to an average of 3.2 percent ad valorem.

Other Provisions

The most significant URA provisions for this sector include agreements that will increase transparency and improve market access. Important provisions include agreements on TRIMs,⁶ rules of origin,⁷ and preshipment inspection.⁸

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the net effect of the URA likely will be a modest enhancement of the strongly positive sector trade balance. There likely will be a small increase in the value of U.S. imports, far outweighed by a modest increase in the value of U.S. exports.

Canada and Mexico are major trading partners with the United States in miscellaneous chemicals; they accounted for about 19 percent of U.S. imports and

⁴—Continued

15-year staging. Tariffs in the 10 to 25 percent range will also be lowered to 6.5 percent, in 10 years. Tariffs in the 5.5 to 10 percent range will be lowered to 5.5 percent, in 5 years. Tariffs ranging from zero to 5.5 percent will be unchanged but subject to future negotiation. The CTHA includes some safeguard provisions against large surges of imports, and provides special consideration for import-sensitive products.

⁵ Many of these countries have substantially reduced their bound tariffs to the rates indicated (15-40 percent), but most of these countries have much lower applied rates today. None of the countries agreed to bind at the current applied rates. Max Turnipseed, official submission to USITC, Mar. 30, 1994.

⁶ Agreement on Trade-Related Investment Measures, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to minimize trade restriction and distortion by investment measures not previously covered by the GATT, such as local-content requirements, trade-balancing requirements, foreign exchange limitations, domestic sales requirements, and export performance requirements.

⁷ Agreement on Rules of Origin, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement sets forth a timetable under which GATT rules of origin will be developed and implemented. The agreement establishes a working committee to consult with the Customs Cooperation Council, a non-GATT entity, in developing GATT rules of origin. The agreement is intended to ensure that such rules are clear and are applied in an impartial, transparent, predictable, consistent, and neutral manner.

⁸ Agreement on Preshipment Inspection (PSI), Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The Agreement seeks to ensure that PSI activities are carried out in an objective, uniform, and non-discriminatory manner that does not create trade barriers.

24 percent of U.S. exports in 1993. U.S. export growth to these markets from 1991 through 1993 was around 15 percent, contrasted with much smaller increases for total U.S. imports and exports. Other important export markets are Japan and Taiwan, which is not a GATT signatory.

Likely Impact on U.S. Production, Employment, and Consumers

The Commission's sectoral model indicates that increased U.S. exports resulting from the URA likely will have a small positive effect on U.S. production and employment. Reduced tariffs under the URA likely will generate a small decline in prices of imported miscellaneous chemicals in this country, but will have little effect on prices of domestic shipments. The benefits of lower prices of miscellaneous chemicals likely will be split between the industrial buyers of chemicals (and their derivatives) and end users.

U.S. Industry Positions on the URA

The report of the Industry Sector Advisory Committee on Chemicals and Allied Products for

Trade Policy Matters (ISAC 3)⁹ indicates support of approximately 15 sections of the URA; non-support of sections dealing with tariffs and market access, antidumping, and subsidies and countervailing duty measures; and no position on several provisions that are largely outside of the interests of U.S. chemical companies.

The chemical markets in most countries in Asia and Latin America are growing fast and should be counted on to generate most of the future growth in U.S. chemical exports and help the sector retain its large chemical trade surplus. However, remaining high tariffs in these countries, combined with lack of reciprocity on reduction of nontariff barriers and increased domestic production, may reduce the potential for the sector's export growth.¹⁰ Producers of gelatin, which has an import duty rate of 8.8 percent, endorse all efforts to reduce tariffs on an equivalent multilateral basis over an equivalent period of time.¹¹

⁹ *Report of the Industry Sector Advisory Committee on Chemical and Allied Products for Trade Policy Matters (ISAC 3) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 10, 1994.

¹⁰ Mr. Earl Anderson, "Chemical Industry Has Misgivings About Uruguay Round Trade Pact," *Chemical and Engineering News*, Jan. 3, 1994, pp. 11-13.

¹¹ Mario Diaz-Guiz, III, spokesman for the Gelatin Manufacturers Institute of America, official submission to USITC, Mar. 28, 1994.

PART IV
LIKELY IMPACT OF THE URA ON U.S.
TEXTILE, APPAREL, AND FOOTWEAR
SECTORS

Summary of the Likely Impact of the URA on U.S. Textile, Apparel, and Footwear Sectors

- The U.S. textile sector is highly competitive in the domestic market, while the U.S. apparel and footwear sectors continue to lose market share to imports. Most U.S. textile and apparel imports are currently subject to bilateral quota agreements negotiated under the GATT-sanctioned Multifiber Arrangement and are subject to some of the highest tariffs of any sector.
- The Uruguay Round Agreement (URA) on Textiles and Clothing¹ will have a greater impact on the U.S. textile and apparel sectors than any other provision under the URA. The agreement will require the United States and other countries with import quotas to phase out these limits in 3 stages over 10 years and to accelerate growth rates for quotas remaining in place during the phaseout period. The agreement requires countries to reduce trade barriers to textiles and apparel in their home markets and allows countries to take action against quota circumvention.
- The textile and apparel sector will benefit from URA provisions on trade-related intellectual property rights. Under such provisions, pirating of textile and garment designs, labels, and trademarks of U.S. firms should be curtailed.
- The cumulative trade effects of the URA will be similar for the textile and apparel sectors, although the magnitude will differ. The U.S. trade deficit for both textiles and apparel is likely to increase. A modest increase (over 5 percent to 15 percent) in textile imports is expected to overshadow a small expansion (over 1 percent to 5 percent) in exports, contributing to a negligible decline (1 percent or less) in textile production and employment. Similarly, a sizeable increase (over 15 percent) in apparel imports is likely to exceed growth in exports, triggering modest declines in apparel production and employment. In both sectors, U.S. consumers are likely to benefit by a small amount from lower prices and greater product diversity.
- The net trade effects of tariff reductions under the URA are likely to be negligible (1 percent or less) but negative for the U.S. footwear sector, as tariff cuts by all countries were small. Moreover, the United States did not offer tariff reductions on products for which non-GATT countries, such as China, are major suppliers. The effects on sector production and employment are also expected to be negligible and negative, but consumers are likely to benefit by a negligible amount.

¹ The Agreement on Textiles and Clothing is discussed in detail in ch. 25.

CHAPTER 25

Agreement on Textiles and Clothing¹

The negotiating objective in the Uruguay Round for the textile and clothing sector was to achieve the eventual integration of sector trade into the GATT on the basis of strengthened rules and disciplines.² World trade in textiles and apparel has been governed by bilateral quotas negotiated under the Multifiber Arrangement (MFA) since 1974.³ These quotas are a departure from the GATT in that they are applied on a country-specific basis in contradiction to the nondiscrimination principle that all GATT-member countries be treated equally when quotas or other trade restrictions are applied. The United States has quotas on MFA products from some 40 countries that supplied almost 80 percent of these imported goods in 1993. The Uruguay Round Agreement (URA) on Textiles and Clothing (agreement) requires members to phase out their quotas over 10 years, after which sector trade will be fully integrated into the GATT and subject to the same rules as other sectors.⁴

Main Elements of the Agreement

The agreement will integrate textile and clothing trade into the GATT primarily by phasing out MFA quotas and accelerating quota growth rates for products not yet integrated into the GATT. A safeguard mechanism in the agreement permits countries to establish quotas on products not yet integrated into the GATT, if necessary to protect their domestic markets from surges in imports. The agreement requires members to reduce trade barriers to textiles and apparel in their home markets and allows countries to take action against quota circumvention.

¹ Agreement on Textiles and Clothing, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations.

² President, "Memorandum of December 15, 1993—Trade Agreements Resulting From the Uruguay Round of Multilateral Trade Negotiations," 58 *Federal Register (ER.)* 67272, Dec. 20, 1993.

³ The Multifiber Arrangement (MFA) was established under the GATT in 1974 to deal with market disruption in importing developed countries, while allowing exporting developing countries to expand their share of world trade in these products. Under the MFA, developed countries negotiate bilateral agreements with exporting developing countries for the purpose of setting quotas and quota growth rates.

⁴ All members of GATT 1994 will be subject to the agreement whether or not they are signatories to the MFA.

Product Integration and Accelerated Quota Growth

Product integration, including quota removal, and the acceleration of quota growth are to occur over 10 years in three stages. At the start of each stage, importing countries must integrate a specified minimum portion of their textile and apparel imports, based on total trade volume in 1990 for the items listed in the annex to the agreement.⁵ During the three stages, at least 51 percent of annex products must be integrated into the GATT; as products are integrated into the GATT, they become subject to normal GATT rules. The remaining 49 percent must be integrated into the GATT at the end of the 10-year period. Importing countries must also accelerate annual quota growth by a specified minimum percentage for products remaining under quota during the transition period.⁶ The timing of the 3 stages, the percentage of trade that must be integrated, and the increase in quota growth rates for products remaining under quota are shown in table 25-1.

The acceleration of quota growth rates is likely to affect U.S. import levels sooner than the integration of sector trade into the GATT. Because importing countries have considerable flexibility in choosing the products for GATT integration at each stage, the United States could delay removing quotas on import-sensitive items until the third stage by first integrating those products not currently covered by its trade agreements under the MFA. Although the agreement requires that countries integrate products from each of four categories (tops and yams, fabrics, made-up textile products, and apparel) in each stage, no allocation percentages are specified.

⁵ About 29 percent of U.S. textile and apparel imports that are subject to GATT integration are either non-MFA goods (such as pure silk goods, jute bags, abaca rope, and coir door mats) or articles that have not been covered by the U.S. quota program (such as seat belts, parachutes, and umbrellas). The U.S. Department of Commerce, Office of Textiles and Apparel, estimates that U.S. imports of products in the annex totaled 17.1 billion square meter equivalents (SMEs) in 1990, the base year for determining the volume of trade for integration into the GATT. U.S. imports of MFA products that year totaled 12.2 billion SMEs.

⁶ The acceleration of quota growth rates will be based on growth rates specified in bilateral MFA agreements in place on the day before the integration of sector trade into the GATT begins.

Table 25-1
Agreement on Textiles and Clothing: Stages, starting dates, share of trade integrated, and increase in quota growth rates

Stage	Starting dates	Share of trade integrated	Increase in quota growth rate ²
			Percent
1	July 1, 1995	16	16
2	July 1, 1998	17	25
3	July 1, 2002	18	27

¹ These dates assume the World Trade Organization (WTO) will enter into force not later than July 1, 1995; Jan. 1, 1995 is the target date identified at the signing meeting in Marrakesh, Morocco, on Apr. 15, 1994.

² The acceleration of quota growth will be advanced by one stage for supplying countries that accounted for 1.2 percent or less of an importing country's total quotas, as of Dec. 31, 1991.

Source: Agreement on Textiles and Clothing, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations.

The impact of the agreement on U.S. import levels also may be lessened, at least in the short term, by the fact that non-GATT countries may not benefit from quota liberalization (both quota elimination and accelerated quota growth rates) unless they become members of GATT.⁷ This exclusion applies to non-GATT countries that are signatories of the MFA, such as China, the largest supplier of textile and apparel imports to the United States, and to non-GATT, non-MFA signatories, such as Taiwan, the second largest supplier.⁸ Other, smaller non-GATT suppliers with which the United States has bilateral textile and apparel quotas under the MFA include Bulgaria, Laos, Lebanon, Nepal, Oman, and Panama.

Safeguards

The agreement contains a transitional safeguard mechanism to protect against surges during the phaseout period of imports of items not yet integrated into the GATT. These safeguards allow importing countries to set quotas on uncontrolled items that enter in such increased quantities as to cause or threaten serious damage to a domestic industry. Safeguards can be set either by mutual agreement or by unilateral action⁹ but are subject to review by the Textiles

⁷ President Clinton has stated that China will not be eligible for quota liberalization until it becomes a GATT member. The administration so far has not stated its policy for other non-GATT nations with which the United States has quotas. President, "Memorandum of December 15, 1993—Trade Agreements Resulting From the Uruguay Round of Multilateral Trade Negotiations," 58 *F.R.* 67274, Dec. 20, 1993.

⁸ Taiwan formally applied for accession to the GATT in 1990. A working party was established in Sept. 1992 to consider Taiwan's membership. The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

⁹ Quotas set by unilateral action must be at a level not lower than the actual level of imports during the

Monitoring Body (TMB), newly created under the agreement to replace the MFA Textiles Surveillance Body and supervise implementation of the agreement. Safeguards are limited to no more than 3 years or until the product is integrated into the GATT.

Circumvention

The agreement contains provisions for member countries to deal with circumvention of quotas by transshipment, rerouting, false declaration of country of origin, or falsification of official documents. Countries must establish internal measures to help detect and prevent circumvention. In cases of circumvention, importing countries may deny entry of the goods, adjust quota charges to reflect true country of origin, and impose restraints on members through which the goods were transshipped. Members may also agree on other remedies in consultation. The TMB must be notified of any such actions.

In anticipation of adoption of the agreement and to deal with current transshipments, the United States extended or renegotiated bilateral MFA agreements expiring in 1993 to include stronger anticircumvention language. These agreements permit the United States to make plant visits to verify production capacity of a foreign producer, apply transshipments to quota of the true country of origin, and charge up to three times the amount of the transshipment against quota in the case of repeated circumvention by a given country.¹⁰

¹⁰—Continued

12-month period ending 2 months before the month consultations were called.

¹⁰ The United States Trade Representative (USTR) has stated that textile and apparel transshipments entering the United States total an estimated \$2 billion a year. Office of the United States Trade Representative, press release, *USTR Mickey Kantor Announces Chinese Textile Import Quotas to be Lowered*, "Fact Sheet on Textile Agreement With China," Jan. 6, 1994, p. 1.

Market Access

The agreement requires all countries, both developed and developing, to achieve improved market access through such measures as cutting and binding tariffs,¹¹ reducing or eliminating nontariff barriers, and facilitating customs, administrative, and licensing procedures. For countries that do not achieve improved market access, the accelerated quota growth rates may be adjusted accordingly. Many developing countries use the GATT balance of payments (BOP) exceptions to maintain market access barriers, including prohibitions on imports of textiles and apparel.¹³

Of the major textile and apparel suppliers that are GATT members, India and Pakistan in particular, as well as Thailand, Indonesia, Egypt, the Philippines, and Turkey are most often cited as maintaining restrictive barriers to their domestic markets for textiles and apparel. At the time of this analysis, India and Pakistan had not offered any comprehensive, substantive commitments in the URA to open their domestic textile and apparel markets to U.S. exports. Indonesia has chosen to bind its textile and apparel tariffs at 40 percent ad valorem.¹⁴ Turkey has agreed to reduce its textile and apparel tariffs within 3 years to levels applied by the European Union. Egypt has agreed to bind its tariffs at 7.5 percent for fibers, 15 percent for yarn, 30 percent for fabric, 35 percent for home furnishings, and 40 percent for apparel. The Philippines has offered to cut its tariffs to 12.5 percent for fibers, 15 percent for yarns, 20 to 30 percent on fabrics and home furnishings, and 30 percent on apparel. Thailand has agreed to bind its textile and apparel tariffs at a maximum of 30 percent as valorem.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee (ISAC 15) for the textile and apparel sector reserved final judgment of the URA pending the outcome of market

¹¹ A "bound" rate of duty under the GATT is a negotiated duty-rate ceiling listed in each GATT member's tariff schedule. Tariff binding legally obligates the grantor to refrain from exceeding the bound level, and to pay compensation or face possible retaliation if the ceiling rate is exceeded.

¹² The agreement states that the GATT Dispute Settlement Body may authorize an adjustment to the accelerated quota growth in stages 2 or 3 with respect to any member country found not to be complying with its obligations under the agreement.

¹³ Articles XII and XVIII of the GATT provide for the implementation of import restrictions by members to forestall or stop a serious decline in monetary reserves, to achieve a reasonable rate of increase in its reserves in the case of low reserves, or for purposes of development in exception to normal GATT obligations.

¹⁴ During the URA, the United States sought to have all countries bind their tariffs at rates no higher than 7.5 percent for textile fibers, 15 percent for yarn, 30 percent for fabric and home furnishings, and 35 percent for apparel.

access negotiations and the content of implementing legislation.¹⁵ The ISAC indicated that the URA will result in increased imports and a decline of 50 to 60 percent in U.S. textile and apparel production. The Committee expressed concern that closed textile and apparel markets in many developing countries impede free global trade in the sector. The Committee claimed that, although market opening is a stated objective of the URA, many developing countries had not yet made effective market-opening offers. The ISAC also stated that agreements on antidumping and subsidies and countervailing measures could have a detrimental impact on the U.S. textile and apparel industries, largely stemming from the de minimis margins established therein. Many textile and apparel products are price sensitive, and the industries indicated that the 2 to 3 percent de minimis standards allowed in the URA could give foreign producers an added advantage over U.S. producers to dump or subsidize imports at levels within the de minimis range. While recognizing that the automatic and timely dispute settlement provisions of the URA will be in the interest of the United States when it brings a complaint, the ISAC expressed concern that U.S. interests could be harmed when the United States is the defendant in a complaint.

The American Textile Manufacturers Institute (ATMI), the national association for the U.S. textile industry, stated that the U.S. textile and apparel sectors will be very negatively affected by the URA. ATMI noted that the agreement will eliminate the MFA in a way that results in rapid import growth during the phaseout, while not forcing truly free and open markets worldwide. ATMI contended that with open markets worldwide, the U.S. textile industry would be able to compete in markets for high quality products. Further, ATMI also expressed concern regarding how the United States would choose to deal with discretionary aspects of the agreement, such as product integration, transitional safeguards, administration of the agreement, and implementing legislation. It also urged the Administration to take strong positions in continuing market access negotiations and on requirements for China's membership in the World Trade Organization (WTO).¹⁶

In a joint submission, four apparel manufacturer associations expressed their view that the integration of sector trade, as structured in the agreement, would accelerate import penetration of the U.S. apparel market.¹⁷ They also believe that the URA threatens to

¹⁵ *Report of the Industry Sector Advisory Committee on Textiles and Apparel for Trade Policy Matters (ISAC 15) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 14, 1994.

¹⁶ American Textile Manufacturers Institute (Washington, DC), official submission to U.S. International Trade Commission (USITC), May 3, 1994.

¹⁷ National Knitwear and Sportswear Association, American Apparel Contractors Association, Atlantic Apparel Contractors Association, and South East Apparel Manufacturers and Suppliers Association (New York, NY), official submission to USITC, Apr. 29, 1994.

eliminate 33 to 75 percent of the domestic apparel production industry's

Wholesalers and retailers support the phaseout of MFA quotas, but expressed concern that reductions in U.S. textile and apparel tariffs, particularly peak tariffs, were minor.¹⁹ The National Retail Federation contended that phasing out the MFA quotas will have several significant, positive effects on the U.S. economy.²⁰ The association stated that the URA will reduce costs of both domestic and imported clothing, widen the selection of apparel products available, improve the competitiveness both at home and abroad of manufacturing industries that use textile inputs, and improve the U.S. economy overall by eliminating the welfare costs of the MFA quotas. It also stated that the U.S. textile industry has exaggerated the detrimental effects of the URA and that the textile industry's

¹⁸ These apparel manufacturers indicate that larger U.S. apparel firms may meet low-wage import competition through importing from their own factories abroad and concentrating domestic production in products made with a high level of machine productivity. They also conclude that smaller companies will likely become importers rather than producers, move production abroad, or leave the industry. These manufacturers state that contract apparel firms that supply labor and equipment services will be especially vulnerable in the new competitive atmosphere created by the URA.

¹⁹ *Report of the Industry Sector Advisory Committee on Wholesaling and Retailing (ISAC 17) on the Uruguay Round Final Act*, pp. 4-6.

²⁰ National Retail Federation (Washington, DC), official submission to USITC, May 2, 1994.

reorganization and capital investment have made it highly competitive.

The Rubber Manufacturers Association (RMA) supports pursuing a level playing field for trade in all rubber products.²¹ It believes that all countries should establish tariffs on these products no higher than the U.S. rate, and that nontariff barriers should be eliminated.

One supplier of ski racing apparel encouraged reinstatement of the 5.5 percent special duty for protective ski racing apparel.²² The National Cotton Council expressed concern over the likely detrimental effect of increased apparel imports on the U.S. market for cotton, as the textile industry is likely to face diminished domestic demand for apparel fabrics and yarns.

The Labor Advisory Committee claims that the agreement is a severe threat to workers in the textile and apparel industries and supplying industries, and that it "clearly means sharp increases in unemployment" in these sectors.²⁴

²¹ Rubber Manufacturers Association (Washington, DC) official submission to USITC, Mar. 31, 1994.

²² Spyder Active Sports, Inc. (Boulder, CO), official submission to USITC, May 10, 1994.

²³ Representatives of the National Cotton Council, USITC staff meeting, Washington, DC, Feb. 16, 1994.

²⁴ *Report of the Labor Advisory Committee (LAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994, pp. 6-7.

CHAPTER 26

Textiles¹

Table 26-1
Textiles: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	772	770	769	-0.4
Trade data (million dollars):				
Shipments	82,070	84,540	85,650	4.4
U.S. exports:				
Total	6,032	6,225	6,356	5.4
GATT ² signatories	5,337	5,552	5,717	7.1
Other	695	673	639	-8.1
U.S. imports:				
Total	7,024	7,856	8,502	21.0
GATT signatories	5,696	6,303	6,792	19.2
Other	1,328	1,552	1,710	28.8
U.S. trade balance:				
Total	-992	-1,631	-2,146	(³)
GATT signatories	-359	-751	-1,075	(³)
Other	-633	-879	-1,071	(³)
Consumption	83,058	86,175	87,800	5.7
Import market share (percent):				
Total	8.5	9.1	9.7	(³)
GATT signatories	6.9	7.3	7.7	(³)
Other	1.6	1.8	1.9	(³)

¹ Shipment data for 1992 and 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Employment data compiled from official statistics of the U.S. Bureau of Labor Statistics; all other data compiled from official statistics of the U.S. Department of Commerce, except as noted.

Summary of Sector Analysis² and U.S. Competitive Position

The U.S. trade deficit in the textile sector likely will experience a sizeable increase (over 15 percent)

¹ The following product groups are covered in this sector: manmade fibers; yarns; fabrics; home furnishings; carpets; and industrial textile products, such as bags, belting, and cordage. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's

under the Uruguay Round Agreements (URA) due to quota liberalization and tariff reductions. The projected modest increase (over 5 percent to 15 percent) in imports of textile products will more than offset the anticipated small gain (over 1 percent to 5 percent) in exports, and will have a negligible negative impact (1 percent or less) on sector production and

²—Continued

sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

employment levels. The comprehensive impact of the URA on the U.S. textile sector likely will be somewhat greater, however, because of the expected loss of yarn and fabric sales to the U.S. apparel sector.³ The impact of the URA on prices for U.S. consumers of textile products likely will be positive but small. In addition to tariff provisions of the URA, the Agreement on Textiles and Clothing⁴ and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) will benefit this sector.

The United States is one of the world's largest and most efficient producers of textile mill products. The domestic sector has achieved some of the highest levels of productivity in the world for the production of high-volume commodity products and in printing, dyeing, and finishing operations. U.S. mills are especially competitive in areas where quality, innovation, marketing, and service are major competitive factors.

The enhanced competitive position of the U.S. textile sector largely stems from significant investment in new technology, increased efforts to coordinate production and marketing with the needs of apparel manufacturers and retailers, and extensive restructuring and consolidation as mills focus on products in which they have a competitive edge. Investment has permitted the U.S. sector to increase productivity and production capacity while reducing employment levels. New technology has enabled many U.S. mills to further improve both their efficiency and flexibility and also to enter into "quick response" partnerships with apparel producers and retailers. Significant improvement in the profitability of the U.S. textile sector in the 1990s will enable the sector to fund further investment in new technology and adopt other strategies to enhance and improve its competitive position.

The U.S. sector supplies most domestic demand for textile products. Direct competition from imports is relatively low in most major segments, particularly yarns, knit fabrics, nonwoven fabrics, carpets, and home furnishings such as sheets and towels.

The greatest direct competition from imports occurs in broadwoven cotton fabrics used mainly in the production of apparel.⁵ Imports, consisting mostly of greige (unfinished) fabrics, now supply 30 percent of domestic demand for cotton fabrics. A large portion of these imported fabrics come from India, Pakistan, and China, which benefit from relatively low costs of raw materials and production. These nations each have government programs that generally keep raw cotton

³ As discussed in the following chapter, the apparel sector is expected to experience a modest decline in production under the URA.

⁴ The Agreement on Textiles and Clothing is discussed in detail in ch. 25.

⁵ Broadwoven cotton fabric makes up roughly 8 percent of the total U.S. textile market.

prices below world market prices,⁶ giving their domestic yarn and fabric mills an advantage in raw material costs.⁷ U.S. mills face further challenges as they are subject to much more stringent health and safety standards and higher labor costs than those in Asia.

The greatest concern facing the U.S. textile sector, however, is the ongoing growth in imported garments. Apparel is the single largest market for the sector, accounting for 37 percent of fiber consumed domestically. Increased import penetration in apparel affects the U.S. textile sector to the extent that such imports substitute foreign-produced yarn and fabric for domestic materials. As apparel imports increase, demand for textile materials by the U.S. apparel industry decreases. The reduced demand for textile inputs by domestic apparel producers has been mitigated somewhat by the growing use of production-sharing operations by U.S. apparel firms in Mexico and the Caribbean Basin. These operations generally use U.S.-produced fabrics in order to qualify for quota preferences given to apparel assembled in the region from U.S.-origin fabric.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The United States has agreed to reduce tariffs on textile products covered by the agreement on Textiles and Clothing by an average of 24 percent, from 10.9 to 8.3 percent ad valorem.⁸ Based on 1993 trade data developed by U.S. International Trade Commission (USITC) staff, the United States has agreed to cut tariffs on yarns and fabrics largely used in apparel by an average of 22 percent, from 8.5 to 6.6 percent ad valorem and from 12.9 to 10.1 percent, respectively. Reductions of at least 40 percent are to be made to the average U.S. tariff on industrial fabrics, from 6.6 to 3.5 percent ad valorem, and on carpets, from 6.4 to 3.7 percent ad valorem. The average U.S. tariff on home furnishings is to be cut by 15 percent, from 9.7 to 8.2 percent ad valorem.

⁶ International Cotton Advisory Committee, "Background Information on the Production and Marketing Policies of Cotton Producing Countries," Washington, DC, May 26, 1993.

⁷ Between 1980 and 1992, total exports of cotton yarn and fabric from India, Pakistan, and China more than tripled, from 527,000 to 1.8 billion metric tons. International Cotton Advisory Committee, *Cotton: World Statistics*, vol. 47, No. 1, Oct. 1993.

⁸ For more information, see U.S. International Trade Commission (USITC), *Production Sharing: U.S. Imports under Harmonized Tariff Schedule Provisions 9802.00.60 and 9802.00.80, 1989-1992* (investigation No. 332-237), USITC publication 2729, Feb. 1994.

⁹ Data on U.S. tariff cuts for textile products were developed by the U.S. Department of Commerce, Office of Textiles and Apparel, based on trade in 1989, the base year for the URA tariff negotiations.

An issue between the United States and the European Union (EU) in the URA was reduction of tariff peaks (tariffs of 15 percent ad valorem or higher). The United States has agreed to reduce the number of tariff peaks in textile products from 214 to 52. The most significant tariff peaks apply to wool and wool-blended fabrics, for which the United States has agreed to reduce tariffs from a trade-weighted average of about 40 percent, to a rate of 25 percent ad valorem.

Current foreign tariff rates on textiles applied by major U.S. export markets are as follows:

Country	Tariff rate <i>(percent ad valorem)</i>
Japan	0-22.4
Canada	0-18
European Union	0-25
Mexico	0-20
Japan	0-22.4
Hong Kong	0
Korea	10-50

Under the URA, the EU has agreed to lower tariffs on textile products by a trade-weighted average of 31 percent, from 8.6 to 5.9 percent ad valorem.¹⁰ Japan has agreed to lower its tariffs by 39 percent, from 7.9 to 4.8 percent ad valorem. Korea has agreed to reduce most tariffs to 13 percent ad valorem, although tariffs on wool fabrics, carpets, bed and bath linens, and many other made-up goods will remain at levels of 30 to 35 percent ad valorem. Hong Kong's applied rates are currently zero, but most were not bound at this level under the URA. Canada and Mexico, the two largest single-country markets for U.S. textile exports, are phasing out their tariffs on U.S. textiles under the North American Free-Trade Agreement (NAFTA).¹¹

Many developing countries currently have bound tariff rates on textiles of 100 percent ad valorem or more, although their applied rates may be lower. In many cases, tariff rates in developing countries are graduated to minimize costs of critically needed inputs and to protect domestic weaving and finished goods industries from import competition. Tariffs of textile-exporting developing countries most frequently cited as having prohibitively high barriers to U.S. exports are shown in the following tabulation:¹²

¹⁰ Trade-weighted tariff averages based on 1993 imports of U.S. textiles covered in Harmonized Tariff Schedule (HTS) chs. 50 through 60 and 63.

¹¹ For more information, see USITC, *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

¹² See the "market access" section in ch. 25 for a discussion of market access commitments offered by these countries in the URA.

Country	Tariff rate <i>(percent ad valorem)</i>
India	40-175
Pakistan	20-90
Thailand	30-100
Indonesia	5-60
Egypt	5-110
Turkey	50-150
Philippines	10-50

Other Provisions

The Agreement on Textiles and Clothing is likely to have a greater economic impact on the U.S. textile sector than any other provision of the URA. The agreement will phase out Multifiber Arrangement (MFA) quotas over a 10-year period. In 1993, the United States had quotas on imported textiles (as opposed to apparel) from 27 countries that supplied 40 percent of U.S. MFA-textile imports. Binding quotas covered as much as 30 to 70 percent of the imports in many yarns and apparel fabrics.¹³

The TRIPs agreement¹⁴ is expected to provide some benefit to the U.S. textile sector. This agreement identifies textile and apparel designs for GATT protection to prevent pirating of fabric designs and product trademarks.

Likely Impact on U.S. Trade

The U.S. trade deficit in the textile sector likely will widen by a sizeable amount as U.S. tariffs and quotas are liberalized. The Commission's sectoral model shows that U.S. textile imports from GATT and non-GATT members likely will grow by a modest amount. The projected growth in U.S. textile exports is expected to be small.

The expected increase in U.S. imports is likely to be widespread among textile products, but especially those from developing countries subject to binding quotas, and those wool and wool-blended fabrics from the EU subject to relatively large tariff cuts. Two

¹³ In general, quotas that are 85 percent or more filled are considered binding since there is uncertainty as to whether additional shipments will be permitted entry.

¹⁴ Agreement on Trade-Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex IC, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope, and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

non-GATT countries—China and Taiwan¹⁵-- accounted for 10.5 percent and 5.1 percent of U.S. imports of MFA textiles under quota in 1993, respectively. Textile products currently restricted by quota include cotton yarn, most cotton and manmade-fiber apparel fabrics, and shop towels (industrial rags).

India, Pakistan, and China likely will benefit the most from URA trade liberalization because of cost advantages in labor and raw materials. These countries, along with Mexico and Canada, are the source of a major portion of the recent growth in U.S. textile imports. China alone accounted for over 11 percent of total U.S. textile imports in 1993. The URA likely will stimulate further growth in textile imports from India, Pakistan, and China, if it becomes a member of GATT,¹⁶ possibly shifting some trade away from other smaller Far East producers.

The expected gains in U.S. textile exports will come from increased sales to traditional markets, such as the EU and Japan. Economic recessions in these markets have had a negative effect on U.S. textile exports in recent years. Canada and Mexico, which make up over one-third of total sector exports, accounted for all U.S. export growth in textiles during 1991-93.

Further gains in U.S. textile exports likely will occur if countries that have essentially banned imports of textiles or have prohibitively high tariffs allow even limited market access. For example, India is a large potential market for U.S. textile exports, but the country currently bans almost all textile imports under GATT balance-of-payment exceptions and has tariff rates of 100 percent or more on most textile products.

Gains in U.S. textile exports likely will occur in: (1) industrial fabrics, such as coated or laminated fabrics and geotextiles for civil engineering applications; (2) high value-added finished apparel fabrics, such as print fabrics and warp knits; (3) specialty yarns, such as novelty and covered spandex; and (4) home furnishings, such as bed and bath linens. In general, export growth will be most significant in

¹⁵ Taiwan formally applied for accession to the GATT in 1990. A working party was established in Sept. 1992 to consider Taiwan's membership. The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

¹⁶ President Clinton has stated that China will not be eligible for quota liberalization until it becomes a member of GATT. President, "Memorandum of December 15, 1993—Trade Agreements Resulting From the Uruguay Round of Multilateral Trade Negotiations," 58 *Federal Register* 67274, Dec. 20, 1993.

products where the United States is the dominant or most innovative producer or has strong brand-name recognition. In many cases, however, foreign tariffs remain relatively high on those products for which the United States has a competitive advantage, such as specialty and industrial fabrics and home furnishings.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, U.S. textile production and employment likely will experience a negligible decrease given the dominant position of U.S. producers in most major segments of the domestic market. However, the model does not estimate the effect on the U.S. textile sector of the expected decline in demand for textile inputs by the U.S. apparel industry as a result of the URA. Given the importance of the domestic apparel market, it is likely that the textile sector will experience a small decrease in overall production and employment levels due to a decline in domestic apparel production.¹⁷

The decline in U.S. textile production and employment will be felt mainly by those yarn and fabric mills most dependent on marketing their output to the domestic apparel industry. In contrast, producers of specialty yarns, industrial fabrics, and certain home furnishings likely will experience some benefit as exports of these products increase.

Negative effects on employment will largely be felt in the Carolinas, where apparel yarn and fabric production is concentrated. Georgia likely will be less affected by the URA, due to the high proportion of carpet manufacturing, which likely will be negligibly impacted by the URA. Although textile mills exist in almost every State, North and South Carolina and Georgia account for one-half of sector employment.

The impact of the URA on U.S. consumers of textile products is likely to be small. Import prices are likely to fall by a modest amount, and domestic prices are expected to decrease by a negligible amount. Consumers may gain some benefit from an increased variety of available products.

U.S. Industry Positions on the URA

U.S. industry positions on the URA are summarized in chapter 25.

¹⁷ See ch. 27, Apparel, for more detail on the likely impact of the URA on the U.S. apparel sector.

CHAPTER 27

Apparels

Table 27-1
Apparel: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	960	960	925	-3.6
Trade data (million dollars):				
Shipments	47,000	48,400	49,900	6.2
U.S. exports: ²				
Total	3,592	4,496	5,2494	6.1
GATT ³ signatories	3,340	4,125	4,8274	4.5
Other	252	371	4226	7.5
U.S. imports:				
Total	26,433	31,451	34,1262	9.1
GATT signatories	19,445	23,019	24,5202	6.1
Other	6,988	8,433	9,6063	7.5
U.S. trade balance:				
Total	-22,841	-26,955	-28,878	(4)
GATT signatories	-16,105	-18,894	-19,693	(4)
Other	-6,736	-8,061	-9,184	(4)
Consumption	69,841	75,355	78,778	12.8
Import market share (percent):				
Total	37.8	41.7	43.3	(4)
GATT signatories	27.8	30.5	31.1	(4)
Other	10.0	11.2	12.2	(4)

¹ United States International Trade Commission (USITC) staff estimated data for 1992 and 1993 based on data for 1991, the last year that official statistics are available on a 4-digit SIC basis. USITC staff adjusted the 1991 data to eliminate double counting of contract receipts reported as shipments by both the contractor and the firm for which the work was done. Such contract receipts account for roughly 15 percent of annual shipments.

² Includes garment parts for assembly abroad and reimportation as completed garments. These parts accounted for 57 percent of reported U.S. apparel exports during 1991-93.

³ General Agreement on Tariffs and Trade (GATT).

⁴ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Employee data compiled from official statistics of the U.S. Bureau of Labor Statistics and trade data from the U.S. Department of Commerce, except as noted.

Summary of Sector Analysis² and U.S. Competitive Position

The liberalization of quotas and tariffs under the Uruguay Round Agreements (URA) likely will

I The following product groups are covered in this sector: apparel and accessories of textile fibers and of nontextile materials, such as leather, fur, rubber, and

¹—Continued

plastics. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

stimulate further investment in apparel production in low wage countries, adding to the competitive pressures facing the U.S. apparel industry. The expected sizeable increase (more than 15 percent) in U.S. apparel imports likely will result in a sizeable increase in the sector's trade deficit, as the gain in imports will more than offset the sizeable gain in the relatively lower level of exports. The industry's shipments and employment likely will decline by a modest amount (over 5 percent to 15 percent). Consumers likely will benefit from small reductions (over 1 percent to 5 percent) in prices of both domestically made and imported apparel. In addition to tariff provisions of the URA, the Agreement on Textiles and Clothing³ and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) will affect this sector.

The U.S. apparel industry faces growing competitive pressures from the ongoing globalization of garment production. In the last three decades, an estimated 50 percent of the productive capacity in the world apparel industry has moved from developed to developing countries.⁴ Major U.S. retailers and producers have helped spur this shift by their search for both lower operating costs and fewer quota restrictions. During the last 10 years, against a backdrop of significant tariff and quota restrictions, U.S. apparel imports grew by 90 percent and doubled their share of the U.S. apparel market to an estimated 43 percent. Developing countries, mainly in Asia, now supply 90 percent of U.S. apparel imports.

To remain competitive and preserve market share, a number of U.S. apparel firms have expanded production-sharing activities in Mexico and the Caribbean Basin. These countries, as a group, have been the fastest growing supplier of imported apparel since the late 1980s, following the introduction of preferential U.S. quotas for garments assembled in the region from U.S.-origin fabric. Between 1991 and 1993, U.S. apparel imports from Mexico and the Caribbean Basin nations grew by 60 percent, and their share of total apparel imports rose from 13.7 to 17.1 percent.⁵ Mexico and the Caribbean Basin nations not only offer labor forces whose costs are competitively priced, but their proximity allows U.S. firms greater control over production and shorter delivery lead times, thereby sharpening their competitive edge against low-cost imports from Asia.

The increasing concentration of buying power in the U.S. retail industry among fewer but larger retailers

³ The Agreement on Textiles and Clothing is discussed in detail in ch. 25.

⁴ U. Hartmann, director, Gherzi Textile Organization (Zurich), "Trends in Textile Capacity," *Textile Asia*, July 1993, p. 70.

⁵ For further information on production-sharing activities and other recent trends in world apparel trade, see U.S. International Trade Commission (USITC), "Recent Trade Treaties Likely to Stimulate Continuing Changes in Global Sourcing of Apparel," *Industry, Trade, and Technology Review*, Feb. 1994, p. 1.

has also intensified competition in the domestic apparel market. To respond quickly to retailer demands and changing fashions, a growing number of U.S. apparel firms have implemented quick response (QR) systems⁶ and other new technology and production methods to reduce the time to design and produce garments and to increase product differentiation and diversification. Given their proximity, domestic suppliers can respond more quickly and efficiently to retailer demands for smaller, more frequent orders than can foreign producers.

Apparel companies with QR capabilities, strong brand-name identification, and consumer loyalty likely will gain market share in the future as large retailers align themselves with reliable suppliers. These competitive advantages are generally associated with large, well-capitalized firms that have a merchandising, as opposed to a production-oriented, business strategy to compete in the global marketplace.⁷ For the thousands of smaller domestic apparel producers, however, the enhanced bargaining power of the large mass retailers has tended to reduce their ability to negotiate prices and delivery dates.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The United States has agreed to reduce tariffs for apparel covered by the Agreement on Textiles and Clothing by 9 percent, from 19.3 to 17.5 percent ad valorem.⁸ On the whole, larger cuts were offered on the already much lower tariffs for other garments, such as those of leather, rubber, plastics, and fur, which account for less than 10 percent of U.S. apparel imports.

An issue between the United States and the European Union (EU) in the URA was reduction of tariff peaks—that is, tariffs of 15 percent ad valorem or higher. Tariff peaks account for about 270 of the roughly 560 tariff provisions maintained by the United States for the classification of knit and woven apparel.⁹

⁶ Quick Response (QR) systems use computers to speed the flow of goods, services, and information among segments of the domestic apparel pipeline, linking apparel producers with textile suppliers and retailers. For further information on the industry's QR programs, see USITC, "Quick Response Applications of Technology Enable U.S. Apparel Companies to Improve Competitiveness," *Industry, Trade, and Technology Review*, Oct. 1992, p. 8.

⁷ The five major U.S. apparel suppliers, which supply about one-fourth of total wholesale apparel sales, have such advantages. These firms are VF Corp. (whose brand names include Lee, Wrangler, and Vanity Fair), Liz Claiborne, Fruit-of-the-Loom, Levi Strauss, and Sara Lee (Hanes and Champion).

⁸ Data on U.S. tariff cuts for apparel were developed by the U.S. Department of Commerce, Office of Textiles and Apparel, based on trade in 1989, the base year for the URA tariff negotiations.

⁹ The highest European Union (EU) tariff rate for apparel is now 14 percent; under the URA this will be reduced to no higher than 12 percent.

The United States has agreed to eliminate approximately 45 percent of the tariff peaks (that is, lower the tariffs below the 15 percent rate).

Many of the tariff peaks offered for elimination by the United States were for wool clothing, for which the EU is a significant supplier. The United States agreed to cut tariffs for wool garments, such as tailored clothing, by an average of 16 percent, from 18.4 to 15.4 percent ad valorem. Tariff cuts agreed to were much smaller for big-volume items, for which developing countries are major suppliers.¹⁰ The United States agreed to reduce tariffs by an average of 10 percent for cotton garments, from 16.6 to 15 percent ad valorem, and by 7 percent for manmade-fiber apparel, from 25.5 to 23.7 percent ad valorem.

Current average foreign tariff rates applied to U.S. apparel exports by selected trading partners are as follows:

Country	Tariff rate (percent ad valorem)
<i>European</i> Union	5.3-14
Japan	11.2-16.8
Korea	13
Canada	13.8
Mexico	20

The EU agreed to lower apparel tariffs by about 12 percent (or 2 percentage points), and Japan by 34 percent (4.5 percentage points). Korea agreed to cut many of its bound rates by 10 to 25 percentage points, to 16 to 35 percent ad valorem, though tariffs remain the average current applied rate shown above. Canada and Mexico, which account for 28 percent of U.S. apparel exports, are phasing out their tariffs on U.S. apparel under the North American Free-Trade Agreement (NAFTA).

Other Provisions

The Agreement on Textiles and Clothing is likely to have a far greater economic impact on the U.S. apparel sector than any other provision of the URA. Under this agreement the United States and other countries will phase out Multifiber Arrangement (MFA) quotas on textiles and apparel over 10 years. The United States currently has quotas on apparel imports from 41 developing countries, which supplied about 70 percent of apparel imports in 1993.

The apparel sector is also likely to benefit from the TRIPs agreement.¹¹ This agreement identifies textile

¹⁰ In 1993, U.S. imports totaled \$14.3 billion for cotton garments, \$10.1 billion for manmade-fiber apparel, and \$2.1 billion for wool clothing.

¹¹ Agreement on Trade-Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex IC, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope,

and apparel designs for GATT protection to prevent pirating of garment, designs, labels, and trademarks. Certain U.S. brand-name garments, such as jeans and athletic clothing, are in great demand throughout the world, which has led to numerous violations of U.S. designs, labels, and trademarks.

Likely Impact on U.S. Trade

The U.S. apparel trade deficit likely will increase sizeably as a result of the URA, according to the Commission's sectoral model. The increase in the value of U.S. imports is expected to be sizeable and will far exceed the expected gain in U.S. exports.

U.S. International Trade Commission (USITC) staff made three different assumptions in using the Commission's import sectoral model: (1) that all countries—both GATT and non-GATT—will be eligible for quota liberalization; (2) that only GATT members will be eligible; and (3) that all but China will be eligible.¹² The model employed an average tariff cut of 2 percentage points for apparel and an estimated tariff equivalent of 16 percentage points for the quotas.¹³ Given these assumptions, the model calculates that U.S. apparel imports will increase sizeably over the long term as a result of the URA. The expected increase in U.S. imports is likely to be widespread among apparel products, especially those from developing countries subject to binding quotas and those wool garments from the EU subject to relatively large tariff cuts. These products would include tailored clothing, outerwear jackets, shirts and blouses, trousers, skirts, sweaters, dresses, gloves, and nightwear.

The URA are likely to foster further investment in apparel production in lower wage countries. This investment is likely to be lead by firms in the traditional Big Three Asian producers—Hong Kong, Korea, and Taiwan; Japanese global trading companies; and major apparel producers and retailers in the United States and the EU. The newer, large

¹¹ —Continued

and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

¹² President Clinton has stated that China, the leading apparel supplier with 18 percent of 1993 imports, will not be eligible for quota liberalization until it becomes a member of GATT. The administration so far has not stated its policy for other non-GATT countries with which the United States has quota agreements, such as Taiwan—the fourth-largest source of U.S. apparel imports with 7 percent of the 1993 total. President, "Memorandum of December 15, 1993—Trade Agreements Resulting From the Uruguay Round of Multilateral Trade Negotiations," 58 *Federal Register* 67274, Dec. 20, 1993.

¹³ Estimated tariff equivalent of Multifiber Arrangement (MFA) quotas derived from USITC, *The Economic Effects of Significant U.S. Import Restraints* (investigation No. 332-325), USITC publication 2699, Nov. 1993, p. 16.

apparel exporters in Asia will remain principal beneficiaries of this investment. If China were to become eligible for benefits of quota liberalization, it would emerge as the main beneficiary of increased foreign investment, given its low labor costs, substantial apparel production capacity, and access to large and growing domestic sources of fiber and textile inputs.¹⁴ Increased investment is also likely in the Association of Southeast Asian Nations (ASEAN) countries,¹⁵ India, and Pakistan, which have established upstream suppliers to their apparel industries and the management and technical expertise to easily expand output.

The Big Three Asian producers are likely to lose U.S. apparel market share as a result of the URA. Rising operating costs, labor shortages, and growing competition from lower wage countries have hurt the competitiveness of these producers relative to that of any other developing country. In fact, some have argued that the MFA benefitted the Big Three Asian apparel producers more than the U.S. industry.¹⁶ The Big Three have retained large quotas based on past trading patterns that have guaranteed their access to the U.S. market.

As a result of the URA, U.S. exports of completed apparel (as opposed to apparel parts for assembly offshore) are likely to increase sizeably.¹⁷ U.S. exports of completed apparel have expanded in recent years but accounted for just 4.5 percent of U.S. producers' shipments in 1993. Major markets for these exports are Japan, Canada, and the EU. Further gains in U.S. apparel exports likely would occur if countries that have essentially banned imports of apparel or have prohibitively high tariffs allow even limited market access.¹⁸ For example, India is a large potential market for U.S. apparel exports, but the country currently bans all apparel imports under GATT balance-of-payments exceptions and has a tariff rate of 100 percent for most apparel products.¹⁹ However, it is likely that the prime

¹⁴ The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATE A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

¹⁵ Brunei, Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

¹⁶ Sri Ram Khanna, "Trends in US and EC Textile and Clothing Imports," *Textile Outlook International*, Nov. 1993, p. 91.

¹⁷ Most of the recent growth in reported U.S. apparel exports has been shipments of apparel parts to Mexico and the Caribbean Basin nations. During 1991-93, these shipments annually accounted for 55 to 60 percent of total U.S. apparel exports.

¹⁸ See the "market access" section in ch. 25 of this report for a discussion of market access commitments offered by these countries in the URA.

¹⁹ India has a middle class of 175 million to 200 million, equivalent to roughly three-fourths of the entire U.S. population. American Textile Manufacturing Institute (Washington, DC), official submission to USITC, May 3, 1994. Aside from India, few developing countries (other than China) with closed apparel markets have a

beneficiaries of any increased market access in the developing countries would be the highly competitive Asian apparel producers, rather than U.S. firms. Any gains in U.S. apparel producers' exports would likely be in high-tech garments for specialized uses and in some basic garments with popular brand names.

Likely Impact on U.S. Production, Employment, and Consumers

The Commission's sectoral model estimates that the expected increase in U.S. apparel imports likely would result in a modest decline in the volume of production and the level of employment. The decrease in output would more than offset the negligible gain in production stemming from increased exports. Any employment losses likely will be felt mainly in the South, the Northeast, and California, where the apparel industry is concentrated.²⁰

The URA likely will accelerate the globalization of apparel production, to some extent. The domestic industry is expected to continue shifting to higher value-added activities, such as consumer research; product development; merchandising; management of sourcing, including use of production sharing and direct importing; and distribution. Apparel firms that have QR programs, popular brand-names, and consumer loyalty are most likely to gain market share. Most of the expected decline in U.S. apparel production and employment likely will occur among smaller firms, especially contractors. Small firms often lack the financial resources, brand names, niche products, and operating efficiencies to compete against larger domestic firms and imports.

U.S. apparel industry segments most likely to lose production volume and employment as a result of the URA are those where tariff cuts are greatest and a large volume of imports are subject to quotas. The greatest impact likely will be on producers of low-end, commodity-type garments in these segments: coats and jackets, shirts and blouses, trousers, suits, skirts, sweaters, and gloves. Imports are most highly competitive in these garment types.

In contrast, domestic production that has been particularly resistant to import penetration, such as high-fashion garments, popular brand-name garments, dresses, and hosiery, is likely to continue to resist substantial growth in import penetration. For apparel products with high inventory costs because of high material prices (such as tailored clothing), or short life

¹⁹—Continued

sufficiently developed middle class or high enough disposable personal income to allow more than minimal market demand for U.S. apparel.

²⁰ Apparel production accounts for an important share of manufacturing jobs in Alabama, California, the Carolinas, Florida, Georgia, Kentucky, Mississippi, New Jersey, New York, Pennsylvania, Tennessee, Texas, and Virginia.

cycles because of rapidly changing trends (such as dresses and trendy sportswear), domestic producers are more capable than foreign sources of responding quickly to changing market demands. In the largely automated hosiery sector, the U.S. industry has access to relatively low-cost capital to acquire sophisticated production machinery and ready access to raw materials (cotton and manmade fiber yarns).

Consumers should experience small reductions in sector prices as a result of the URA. Larger price effects are likely for imports of apparel from countries

granted quota concessions. Import prices for these products are likely to decline modestly, benefitting consumers.

U.S. Industry Positions on the URA

U.S. industry positions on the URA are summarized in chapter 25.

CHAPTER 28

Footwear¹

Table 28-1
Footwear: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	79	75	61	-21.9
Trade data (million dollars):				
Shipments	4,323	4,339	4,821	11.5
U.S. exports:				
Total	543	603	604	11.4
GATT ² signatories	487	518	530	8.7
Other	55	85	75	34.8
U.S. imports:				
Total	9,542	10,141	11,105	16.4
GATT signatories	5,750	5,852	5,972	3.9
Other	3,792	4,289	5,133	35.4
U.S. trade balance:				
Total	-9,000	-9,538	-10,501	(³)
GATT signatories	-5,263	-5,334	-5,442	(³)
Other	-3,737	-4,204	-5,059	(³)
Consumption	13,323	13,877	15,322	15.0
Import market share (percent):				
Total	71.6	73.1	72.5	(³)
GATT signatories	43.2	42.2	39.0	(³)
Other	28.5	30.9	33.5	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

Tariff concessions in the Uruguay Round Agreements (URA) likely will have a negligible negative impact (1 percent or less) on the net trade

¹ This sector covers footwear and footwear parts. See app. F, vol. II, for trade tables for this sector.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to

flow of the U.S. footwear sector and on U.S. production and employment. U.S. consumers can expect a negligible but positive impact through lower prices and greater variety of products. No other URA provisions are likely to significantly affect this sector.

The competitive position of the U.S. footwear sector has weakened over the past decade. In 1993, the domestic industry supplied just 14 percent of the U.S.

²—Continued
reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

footwear market of 1.55 billion pairs, compared with a 31-percent share in 1984. China, the world's largest producer, captured 52 percent of the U.S. market. China and other developing countries generated 82 percent of world footwear output and 75 percent of world exports in 1992. The United States is the largest import market, taking 38 percent of the total and producing only 3 percent of world output.

The decline of the U.S. footwear sector reflects the substantial competitive advantage of developing country suppliers in labor costs. Wage rates in some of the major producing Asian nations are less than 5 percent of those in the United States, where labor costs represent nearly 30 percent of production costs. U.S. industry sources contend that no amount of technological innovation or marketing can narrow the gap in labor costs between the United States and these countries.³

The competitive strength of the U.S. footwear sector lies in its ability to respond quickly to fashion changes, produce quality products, and provide support services. Generally, the few large firms in the sector have invested in technology to help integrate design, production, management, and marketing in an effort to cut costs and improve services. However, many smaller firms have neither the volume nor the resources to invest in such technology.⁴ Several large firms also sell imported shoes as part of a global sourcing strategy, or operate retail stores to provide a captive outlet for their goods. Some firms have moved into more capital-intensive segments, such as rubber and plastic footwear, which are also protected from imports by high tariffs.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

U.S. tariffs range from free to 15 percent ad valorem for nonrubber footwear and from 20 to 58.6 percent ad valorem for rubber footwear. Under the URA, the United States has agreed to reduce these tariffs on average by less than 1 percentage point. Based on 1993 trade, the average tariff for footwear will decline from 10.9 to 10.4 percent ad valorem, reflecting cuts in the average rates for nonrubber

³ A study of the footwear sector in France, Italy, and the United Kingdom found that technical change had a limited impact on improving competitiveness. International Labour Organization, *Recent Developments in the Leather and Footwear Industry*, Report 1, Geneva, 1992, p. 14; and U.S. industry officials, U.S. International Trade Commission (USITC) staff telephone interviews, Apr. 18, 1994.

⁴ New capital expenditures in the U.S. footwear sector averaged \$736 per production worker during 1987-91, or just one-tenth the average for all U.S. industries

footwear from 8.6 to 8 percent and rubber footwear from 27.6 to 27.5 percent.

The United States limited tariff offers in footwear to products for which the domestic sector is not competitive or that it does not produce.⁵ The United States also agreed to reduce tariffs slightly for footwear parts, imports of which come mostly from developing countries and already enter duty-free under the Generalized System of Preferences (GSP).

The European Union (EU), the largest market for U.S. footwear exports with 22 percent of the 1993 total, agreed to cut footwear tariffs on average by less than 1 percentage point under the URA. EU footwear tariffs currently range from 4.6 to 20 percent of the c.i.1⁶ value (4.9 to 25 percent for Portugal), or a trade-weighted average duty of 10.4 percent ad valorem. Mexico and Canada, which together accounted for 29 percent of U.S. footwear exports, are phasing out their tariffs on U.S. footwear under the North American Free-Trade Agreement (NAFTA).

U.S. footwear shipments to Japan, which received 10 percent of the U.S. exports in 1993, are generally dutiable at rates ranging from 10 to 60 percent ad valorem. Japan also has tariff-rate quotas on U.S. nonathletic leather footwear. Most footwear tariff reductions offered by Japan under the URA are in leather footwear, duties on which are to be cut by an average of 5.4 percentage points to 21.6 percent ad valorem. Japan agreed to cut tariffs on the tariff-rate quota footwear to the higher of 30 percent ad valorem or 4,300 yen (\$41 at the current exchange rate) from the current level of 60 percent ad valorem or 4,800 yen (\$46).⁷ Japanese tariffs on most other footwear will remain unchanged.

Most developing GATT countries have high tariffs and supplementary taxes; their tariff cuts under the URA are negligible.

Other Provisions

No other URA provisions are likely to significantly affect the U.S. footwear sector.

Likely Impact on U.S. Trade

The URA likely will have a negligible negative impact on U.S. footwear trade, largely because of limited tariff cuts by the United States and the EU. The Commission's sectoral model estimates that the total value of U.S. footwear imports likely will grow negligibly and the current low level of U.S. exports is

⁵ These included inexpensive leather and vinyl footwear, buffalo sandals, wool felt footwear, certain fabric-upper footwear valued at more than \$12 a pair, wood footwear without insoles, ski boots, and leather sports footwear except golf shoes.

⁶ Customs, freight, and insurance.

⁷ Because the rate expressed in terms of yen is almost always the higher rate, the real tariff reduction is only 10 percent (i.e., from 4,800 yen to 4,300 yen).

expected to rise modestly (over 5 percent to 15 percent). Import increases are likely to be concentrated in sports footwear, a growing market in which tariff cuts were above the sector average.

Gains in U.S. footwear exports are likely in the traditional developed-country markets, such as the EU and Japan. Export opportunities might emerge in markets of developing countries, such as Brazil, Thailand, and South Korea, that cut their high footwear tariffs in the URA. However, it is likely that the prime beneficiaries of any increased access in these footwear markets would be Chinas and other competitive exporting developing countries.

Likely Impact on U.S. Production, Employment, and Consumers

The Commission's sectoral model indicates that the URA likely will have a negligible negative impact on U.S. production and employment. The share of the domestic footwear market supplied by the U.S. sector is not expected to change significantly; the expected decline in sector activity likely will be concentrated in sports footwear. The expected beneficial impact of the tariff cuts on U.S. consumers will be negligible but

⁸ The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

positive, with prices falling by an average of less than 1 percent for both domestic and imported footwear.

U.S. Industry Position on the URA

The U.S. footwear industry supports the URA as it relates to footwear.⁹ Industry officials expressed concern that Japan and the principal supplying developing countries did not open their markets sufficiently, at least in the short term, and that this lack of market access would hurt the industry's ability to expand exports.¹⁰ Retailers and wholesalers expressed concern that the URA did not achieve significant cuts in U.S. peak tariffs on footwear."

The Florsheim Shoe Company, a division of Interco, Inc., in support of the URA, stated that tariff cuts on leather under the URA will promote domestic production of leather footwear and will have a positive financial impact on the industry, employment, and consumers.¹¹

⁹ U.S. industry officials concur that the URA will have a negligible effect on U.S. trade, production, employment, and consumers.

¹⁰ *Report of the Industry Sector Advisory Committee on Footwear; Leather and Leather Products (ISAC 8) on the Uruguay Round Final Act*, Jan. 11, 1994, pp. 3 and 11. U.S. industry officials interviewed by USITC staff in Mar. 1994 agree with the ISAC position.

¹¹ *Report of the Industry Sector Advisory Committee on Wholesaling and Retailing (ISAC 17) on the Uruguay Round Final Act*, Jan. 10, 1994, p. 4.

¹² Steven P. Sonnenberg, Jacqueline Paez, and Frederick W. Faery, Sonnenberg, Anderson, & Rodriguez, on behalf of Florsheim Shoe Company, a division Interco, Inc., official submission to USITC, May 2, 1994.

PART V
LIKELY IMPACT OF THE URA ON U.S.
MINERALS AND METALS SECTORS

Summary of the Likely Impact of the URA on U.S. Minerals and Metals Sectors

- U.S. minerals and metals sectors covered in detail in this report include nonferrous minerals, metals, and related products; flat glass, fiber glass, and miscellaneous glass products; industrial and household ceramics; non-metallic industrial minerals; steelmaking raw materials; basic iron and steel products; and fabricated metal products.
- U.S. minerals and metals sectors are generally highly competitive in the U.S. market, and, to a lesser extent, internationally. Certain sectors, notably basic iron and steel products and fabricated steel products, have made substantial efforts to increase their competitiveness through investment and rationalization of capacity.
- Minor reductions in U.S. and foreign tariffs under the Uruguay Round Agreements (URA) are not likely to have widespread effect on the U.S. minerals and metals sectors. Most imports to the U.S. are already subject to low tariffs and many sector products enter subject to zero or reduced duties under the North American Free Trade Agreement and the Generalized System of Preferences. However the URA do include zero-for-zero agreement eliminating tariffs on most steel products.
- Although tariff reductions are the most significant URA provision affecting the U.S. minerals and metals sectors, certain sectors may be affected by agreements on safeguards (steel products) and antidumping and subsidies and countervailing measures (certain nonferrous minerals and metals, basic iron and steel, and fabricated metal products). The impact of these agreements depends on how implementing legislation affects the administration of other provisions and the likelihood of imposition of additional import duties. Agreements related to standards and government procurement are expected to benefit non-metallic industrial minerals and steel products, respectively, by opening foreign markets for U.S. exports.
- The URA are likely to have a negligible (1 percent or less) net trade effects on U.S. minerals and metals sectors. Three sectors—nonferrous minerals, metals, and related products; flat glass, fiberglass, and miscellaneous glass products; and steelmaking raw materials—are expected to achieve negligible improvements in trade balances, production, and employment; other minerals and metals sectors likely will face negligible declines in these areas. Lower prices and wider product diversity likely will allow U.S. consumers of most sector products to realize negligible benefits, with small benefits (over 1 percent to 5 percent) accruing to consumers of industrial and household ceramics.
- Although the general effect of the URA on minerals and metals sectors likely will be negligible, the effect on certain component industries and product groups is expected to be greater. Imports of steel wire products are expected to increase by a modest (over 5 percent to 15 percent) amount, resulting in negligible declines in domestic production and employment. The ceramic tile industry likely will experience a modest decline in its trade balance, resulting in a small decrease in production and employment. The reduction of high U.S. tariffs on unwrought zinc alloys likely will result in increased imports, resulting in declines in production and employment.

CHAPTER 29

Nonferrous Minerals, Metals, and Related Products¹

Table 29-1
Nonferrous minerals, metals, and related products: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	249	247	247	-1.0
Trade data (million dollars):				
Shipments	42,783	44,583	40,457	-5.4
U.S. exports:				
Total	11,755	11,381	15,573	32.5
GATT ² signatories	10,825	10,070	14,528	34.2
Other	930	1,311	1,045	12.4
U.S. imports:				
Total	12,406	12,347	12,804	3.2
GATT signatories	11,813	11,712	11,545	-2.3
Other	594	635	1,259	112.0
U.S. trade balance:				
Total	-651	-966	2,769	(³)
GATT signatories	-988	-1,642	2,983	(³)
Other	336	676	-215	(³)
Consumption	43,434	45,549	37,688	-13.2
Import market share (percent):				
Total	28.6	27.1	34.0	(³)
GATT signatories	27.2	25.7	30.6	(³)
Other	1.4	1.4	3.3	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) are expected to have a negligible (1 percent or less)

¹ The following product groups are covered in the discussion of this industry sector: copper ores and concentrates; lead ores and residues; zinc ores and residues; certain ores, concentrates, ash, and residues; precious metal ores and concentrates; precious metals and related articles; copper and related articles; unwrought aluminum; aluminum mill products; lead and related articles; zinc and related articles; and certain base metals

positive effect on net trade, production, and employment, and on consumers of nonferrous minerals, metals, and related products because there are few significant reductions in applicable U.S. or

¹—Continued

and chemical elements. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

foreign tariffs. However, the URA are expected to have some negative effects on the U.S. unwrought zinc alloy industry because of large reductions in relatively high existing U.S. tariffs on these products. In addition to tariff provisions, the agreements on antidumping and subsidies may also affect this sector.

The United States is the largest manufacturer of nonferrous products in the world and ranks as a leading country in its share of world production for many of the major nonferrous metals, including aluminum, copper, zinc, and lead. Many industries in the sector have well-integrated U.S. operations that include mineral, metal, and semifabricates production. U.S. industries generally employ a high degree of automation and, especially in copper and gold mining, extensively use the low-cost leaching method of mining. The United States is also a huge generator of nonferrous waste and scrap, which is used by U.S. secondary nonferrous industries that recycle the material into metal and semifabricated products.

The United States is also the world's largest consumer of nonferrous products in a wide variety of end-use sectors, such as the automotive, aircraft, electronics, and construction industries. In most cases, consumption of these products exceeds U.S. production. Imports of certain nonferrous mineral products and metals, such as aluminum, titanium, nickel, tungsten, and platinum-group metals, compose a large share of U.S. demand.

The United States is at a competitive disadvantage in the mining of ores and the processing of ores and concentrates into metals compared with some less-developed countries that have extensive natural

resources. In general, producers in these less-developed countries have low operating costs because of higher grade mineral deposits, less costly labor, and less costly environmental compliance regulations. Because of the lack of downstream consuming industries, these countries export most of their production.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated tariff rate for U.S. sector imports from GATT countries was less than 1 percent ad valorem in 1993. A sizeable amount of imports enter duty-free under preferential tariff provisions, such as the Generalized System of Preferences. Canada is the leading U.S. supplier, accounting for almost half of total imports (by value) in 1993; imports from Canada enter duty-free or with low duties under the North American Free-Trade Agreement (NAFTA).³ However, certain U.S. tariffs for sector products are significantly higher. U.S. tariffs for aluminum and aluminum alloy flat products⁴ generally

³ For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

⁴ Flat products include plates, sheets, strip, and foil.

Table 29-2
Certain nonferrous ores, refined metal, and semifabricates: World and U.S. production, and U.S. ranking, 1992

Item	World Production	U.S. Production	U.S. Ranking
<i>Thousand metric tons</i>			
Aluminum			
Ore	106,419	45	20
Refined metal	25,436	6,273	1
Semifabricates ¹	16,575	6,093	1
Copper			
Ore	9,275	1,761	2
Refined metal	11,087	2,144	1
Semifabricates ²	11,176	2,808	1
Zinc			
Ore	7,217	552	5
Refined metal	6,886	394	5
Lead			
Ore	2,981	408	1
Refined metal	5,290	1,158	1

¹ 1991 data.

² Does not include castings.

Note.—Ore includes all mine production and is total production for aluminum and metal content for all other ores. Semifabricates data do not include China and the countries of the former Soviet Union. Zinc and lead semifabricates production not available.

Source: World Bureau of Metal Statistics.

range from 3 to 6 percent ad valorem; and tariffs for copper and copper alloy flat products and pipe and tube range from 1 to 7 percent ad valorem. Unwrought zinc alloys have one of the highest U.S. column 1 tariffs for sector products at 19 percent ad valorem.

Few U.S. tariffs on nonferrous products are to be significantly reduced under the URA. The sector's average calculated tariff rate with the URA reductions is about 0.5 percent. However, there are to be substantial tariff reductions for certain industries: unwrought zinc alloys (from 19 to 3 percent ad valorem), zinc flakes (from 9.5 to 3 percent), lead powders and flakes (from 11.2 percent to free), certain unwrought and wrought gold products (from 8.2 to 4.1 percent), tungsten ores (from 6.6 percent to free), certain semimanufactured base metals coated with gold or silver (from 20 to 6-10 percent), copper articles coated with precious metals (from 10 to 3 percent), and copper fittings (from 11.2 to 3 percent).

Approximately 70 percent of U.S. exports are unwrought and waste/scrap forms of gold, silver, platinum-group metals, copper, and aluminum, which already enter most GATT countries with little or no tariffs.⁵ Some important exceptions include the European Union (EU) and Japanese tariffs on aluminum semifabricates (10 and 3 percent, respectively); the Japanese tariff on refined copper (21 yen/kilogram, equal to an ad valorem equivalent (AVE) of 9.6 percent);⁶ and Korean tariffs on unwrought and wrought copper (10 percent to 25 percent). The new tariff rates offered in these markets are as follows: 7.5 percent and 2 percent, respectively, for the EU and Japanese aluminum semifabricates tariff, 3 percent for the Japanese tariff on refined copper, and a 6.8 percentage point reduction in Korean unwrought and wrought copper tariffs.

Other Provisions

Other URA provisions that affect this sector include antidumping, subsidies, and countervailing measures. The URA antidumping agreement⁷ adds a

⁵ U.S. exports of gold bullion were \$9 billion in 1993, up from \$4 billion in 1992, and accounted for the substantial increase of sector exports in 1993. According to industry sources, this increase was caused by a high level of financial and speculative activity and not by industrial demand.

⁶ A temporary rate of duty of 15 yen/kilograms (an ad valorem-equivalent (AVE) of 6.9 percent) applies to Japanese imports from GATT countries. AVEs were calculated based on a 1993 exchange rate of 110 yen per dollar and an average 1993 copper price of \$0.90 per pound.

⁷ Agreement on Implementation of Article VI of GATT 1994, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement sets forth rules that govern the application of article VI of the GATT 1994 relating to the imposition of antidumping measures.

sunset provision and provides a de minimis threshold dumping margin for affirmative determinations. Since several nonferrous products currently are subject to antidumping duties, the sunset provision could result in the expiration of antidumping orders and may lead to an increase in imports.

The URA specifically makes certain subsidies for regional development and environmental expenditures non-actionable,⁸ meaning that the U.S. industry will not be able to obtain trade relief if foreign industries receive these types of subsidies.⁹ Typically, environmental capital and operating expenditures for mining and mineral processing ventures are significant, especially in developed countries, and companies that receive government subsidies can have a cost advantage over those that do not receive subsidies.

Likely Impact on U.S. Trade

The tariff reduction provisions of the URA will have the greatest effect on this sector, although the net effect on U.S. trade is expected to be a negligible positive change, according to the Commission's sectoral model. This is due, in part, to the fact that Canada and Mexico accounted for 49 percent of sector imports and 22 percent of sector exports in 1993; duties on trade between the United States, Canada, and Mexico are scheduled to be eliminated under NAFTA.

The likely effect of the URA on U.S. imports of sector products is expected to be negligible overall. Most sector imports already enter duty-free or with low tariffs and the trade-weighted overall tariff reduction for all sector products is less than 1 percentage point. No significant shifts in import sources are anticipated. Imports accounted for 34 percent of the U.S. market in 1993, and this share is not expected to change. Principal suppliers in 1993 included Canada (45 percent by value), South Africa (8 percent), Russia (6 percent), Mexico (4 percent), and Germany (3 percent).

For the unwrought zinc alloy industry, however, the effect of the URA on U.S. imports of unwrought zinc alloys is expected to be greater. The expected change in imports due to the tariff reduction is difficult to quantify because the present U.S. tariff on unwrought zinc alloys is high and effectively prohibits imports. However, the increase in such imports is likely to be modest to sizeable (over 5 percent) because

⁸ Agreement on Subsidies and Countervailing Measures, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement defines prohibited, actionable, and non-actionable subsidies; and sets forth rules for imposition of countervailing measures in accordance with article VI of the GATT 1994 with respect to goods benefiting from prohibited or actionable subsidies.

⁹ The Nonferrous Metals Producers Committee, which represents certain U.S. copper, lead, and zinc producers, has been concerned about alleged subsidies received by Canadian copper, lead, and zinc producers, although no trade remedy actions have been requested. See "USTR Takes First Step Towards Possible Action Against Canadian Copper, Lead," *Inside U.S. Trade*, July 7, 1989, p. 4.

zinc alloys are basic commodity items that are easily substitutable and there are major foreign zinc producers (e.g., Australia) that would probably have little difficulty increasing zinc alloy exports to the United States. Moreover, foreign zinc alloy producers are likely to have a cost advantage because they are integrated with zinc mineral and metal production, in contrast to U.S. producers who purchase zinc for alloying.

The likely effect of the URA on U.S. exports of sector products is expected to be negligible. The URA contains tariff reductions for few nonferrous products in foreign markets, estimated to be less than 1 percentage point on a trade-weighted basis. According to the Commission model, this tariff reduction is likely to cause an increase in sector exports of less than 1 percent. No significant shifts in export markets are anticipated. However, a small increase (over 1 percent to 5 percent) in U.S. exports of refined copper is expected, primarily because of the reduction in Japanese tariffs on refined copper. Japan accounted for 21 percent of U.S. refined copper exports in 1993. Exports of all sector products composed 38 percent of U.S. shipments in 1993, and this share is not expected to materially change. Principal export markets in 1993 were the United Kingdom (27 percent by value), Switzerland (19 percent), Canada (17 percent), Japan (8 percent), and Mexico (5 percent).

Likely Impact on U.S. Production, Employment, and Consumers

There likely will be a negligible positive effect on overall U.S. production and employment for this sector, according to the Commission's sectoral model. Any decrease in production and employment due to increased imports is expected to be offset by increases due to increased exports. A negligible increase in production and employment in the refined copper industry is likely to result from anticipated higher exports.

The impact of the URA on U.S. consumers of these products likely will be negligible due to very small decreases in the price of U.S. products and the prices of GATT and non-GATT imports. Increased imports may increase the variety of available products, contributing to a small gain for U.S. consumers.

The impact on U.S. unwrought zinc alloy production and employment is expected to be greater. Although the expected increase in imports is difficult to quantify, any increase likely will cause an equal decrease in U.S. production and a proportional decrease in employment in this industry. The U.S. unwrought zinc alloy industry is composed of 17 companies, located primarily in California, Illinois, Michigan, and New York, employing 15 to 100 people each. The effect on the U.S. industry may be lessened

because the product's consumers tend to be small businesses, and foreign suppliers may find it costly to develop a channel of distribution for these consumers.

U.S. Industry Positions on the URA

Nonferrous industry representatives generally support the URA, although most have objections to certain provisions. The main objections include some of the nontariff provisions of the URA and the lack of significant market access improvement, especially for the aluminum and copper semifabricates industries. However, the U.S. unwrought zinc alloy industry does not support the URA because of the reduction in the U.S. tariff.

The Industry Sector Advisory Committee on Nonferrous Ores and Metals (ISAC 11) has reservations regarding antidumping, trade-related investment measures (TRIMs), and subsidies provisions of the URA.¹⁰ The ISAC believes that U.S. antidumping laws will be weakened as a result of the URA because of the new sunset provision, the de minimis threshold, and the lack of effective anticircumvention provisions.

ISAC 11 members are concerned that more stringent investment rules are not included in the URA. Although the TRIMs agreement improves the treatment of investments,¹¹ it does not cover the general investment policies of member countries, which according to ISAC 11 means that mining and other natural resource investments can continue to be excluded from national treatment coverage.

Alleged subsidies granted by foreign governments to their minerals and metals producers are a major concern of ISAC 11. According to U.S. industry sources, these subsidies confer an unfair advantage to the foreign producers. Therefore, the U.S. industry is concerned that the URA permits certain subsidies for regional development and environmental reasons. However, the U.S. industry supports the provision that allows a country to bring action against another country's subsidized exports to a third country.

ISAC 11 members are also concerned that the URA does not specify rules about the activities of state-owned or -controlled mineral producing companies. The U.S. industry claims that state industries operate at excessive production levels during periods of world oversupply to maintain employment and export earnings, depressing prices and distorting trade to the detriment of private companies. ISAC 11 members note that the URA provides for the creation of a working party that will attempt to develop a list of

¹⁰ *Report of the Industry Sector Advisory Committee on Nonferrous Ores & Metals for Trade Policy Matters (ISAC 11) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 14, 1994.

¹¹ *Ibid.*

permissible practices by state companies, which they hope will discipline these activities.

The U.S. brass industry is particularly concerned about the grandfather clause of the sunset provision applicable to existing antidumping and countervailing duty orders; industry representatives believe the 5-year limit of such orders should not begin until the effective date of the URA.¹² In addition, they claim that market access barriers continue to exist in foreign markets for brass mill products because only small reductions in foreign tariffs appear to have been made.

The Independent Zinc Alloyers Association (IZAA), which represents U.S. unwrought zinc alloy producers, believes the U.S. tariff reduction on unwrought zinc alloys from 19 to 3 percent will cause imports to increase to the point that the domestic

¹² Representative of the U.S. brass industry, USITC staff telephone interview, Mar. 14, 1994.

industry will disappear.¹³ IZAA further claims that U.S. producers will not be able to export to the foreign producers' markets to make up for lost domestic sales because of a significant cost disadvantage.

The Aluminum Association (AA), which represents U.S. unwrought and semifabricates aluminum producers, is disappointed that tariffs on aluminum were not eliminated.¹⁴ They note that while certain foreign tariffs on aluminum mill products were reduced, EU tariffs on these products remain high and the EU is still a "closed market" for U.S. exports. According to the AA, Japan did make important reductions in tariffs for aluminum ingot and flat products.

¹³ Independent Zinc Alloyers Association (Washington, DC), official submission to USITC, May 6, 1994.

¹⁴ Aluminum Association (Washington, DC), official submission USITC, Apr. 29, 1994.

CHAPTER 30

Flat Glass, Fiberglass, and Miscellaneous Glass Products¹

Table 30-1
Flat glass, fiberglass, and miscellaneous glass products: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	168	172	178	6.0
Trade data (million dollars):				
Shipments	19,647	20,400	21,800	11.0
U.S. exports:				
Total	1,789	1,900	2,025	13.2
GATT ² signatories	1,697	1,805	1,918	13.0
Other	92	95	108	17.3
U.S. imports:				
Total	1,778	1,955	2,140	20.4
GATT signatories	1,609	1,746	1,940	20.5
Other	168	209	200	18.9
U.S. trade balance:				
Total	11	-54	-115	(³)
GATT signatories	88	59	-22	(³)
Other	-77	-114	-92	(³)
Consumption	19,636	20,455	21,915	11.6
Import market share (percent):				
Total	9.1	9.6	9.8	(³)
GATT signatories	8.2	8.5	8.9	(³)
Other	0.9	1.0	0.9	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) are likely to have a negligible (1 percent or less) positive effect

I The following product groups are covered in the discussion of this industry sector: flat glass and certain flat glass products; glass containers; household glassware; certain glass and glass products; and fiberglass products. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's

on net trade for the flat glass, fiberglass, and miscellaneous glass products sector because the proposed U.S. and other GATT-country tariff reductions are relatively moderate and favor U.S. exports. The URA are expected to result in small (over 1 percent to 5 percent) increases in the quantity of U.S. imports and exports, negligible net increases in the

²—Continued

sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

quantity of U.S. production and employment, and a negligible positive impact on consumers. No URA provisions other than tariff reductions are expected to have a significant effect on this sector.

The United States, the European Union (EU), and Japan dominate world production, consumption, and trade of these products, representing 75 percent of the value of world trade in 1992. U.S. and EU shares of world production are relatively similar, with Japan's share roughly half that of the United States and EU. Production technologies are relatively similar worldwide.

Shipping costs tend to limit trade in these products, simultaneously enhancing the U.S. industry's relative competitive strength in the U.S. market⁴ and weakness in export markets.⁴ Producers have tended to service foreign markets through licensing agreements and the acquisition or establishment of foreign production facilities, rather than by trade. U.S. and foreign producers have been especially active in the establishment and acquisition of foreign facilities in the flat glass and fiberglass segments of this sector, industries requiring substantial capital and technical expertise.

Key Uruguay Round Positions Affecting Sector

Tariff Provisions

The average calculated tariff rate for U.S. sector imports from GATT countries was 5.3 percent ad valorem in 1993, excluding duties on imports from Canada and Mexico⁵ and including imports entering under special provisions such as the Generalized System of Preferences. The average U.S. rate is lower than Korea's 27.5 percent ad valorem, similar to the EU's 7.3 percent, and higher than those of Japan and Hong Kong at 3.5 percent and free, respectively.⁶ The United States has agreed to reduce the U.S. ad valorem tariff rate for total imports by 1.2 percentage points, compared with declines of 10.0, 2.3, and 3.2 percentage points for the U.S. export markets of

³ Imports represented less than 10 percent of apparent U.S. consumption in 1993.

⁴ Exports represented less than 10 percent of U.S. producers' shipments in 1993, with 51 percent of exports going to Canada and Mexico, whose locations adjoining the United States minimize transportation costs.

⁵ Duties for trade with Canada and Mexico will be reduced under the North American Free-Trade Agreement (NAFTA). For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the Mexican Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

⁶ Calculations based on GATT-bound rates. The rate for Japan is 1.3 percent ad valorem when the lower temporary rates applicable to U.S. exports are applied.

Korea, the EU, and Japan, respectively.⁷ Existing minor U.S. export markets tend to have significantly higher rates than the United States, a situation that is unlikely to change under the URA. Tariffs are to decline by an average of 5.2 percentage points for the 10 largest minor export markets.

Other Provisions

No other URA provisions are expected to have a significant effect on this sector.

Likely Impact on U.S. Trade

Somewhat larger reductions in foreign tariffs than those implemented by the United States under the URA are expected to have a negligible positive effect on net trade in this sector, with export quantity and value increases exceeding respective import increases, according to the Commission's sectoral model.

An average U.S. duty reduction for sector products of 1.2 percentage points is expected to result in a small increase in the quantity and a negligible increase in value of imports from GATT countries. The URA will have a limited effect on sector imports because the U.S. duty reductions are relatively moderate and 30 percent of the value of U.S. imports will be unaffected by the GATT (23 percent entered duty-free in 1993 and 7 percent entered as dutiable imports from Canada or Mexico). The import penetration ratio for the sector was under 10 percent in 1993, with the EU, Canada, Japan, and Mexico the largest suppliers by value. No significant geographic shifts in imports are anticipated because of the URA.

An estimated average duty reduction of 1.5 percentage points⁸ for all foreign countries likely would result in a small increase in the quantity and a negligible increase in value of exports to GATT countries. The URA will have a limited effect on sector exports because the foreign duty changes involved are relatively minor and Canadian and Mexican markets account for about 50 percent of the value of U.S. exports (51 percent in 1993). The major U.S. export markets by value in 1993 were Canada, the EU, Mexico, and Japan. No significant geographic shifts in exports are anticipated because of the URA.

Likely Impact on U.S. Production, Employment, and Consumers

The URA are likely to result in negligible net increases in U.S. production and employment, with

⁷ The average reduction for Japan is 1.0 percentage point when the lower temporary rates applicable to U.S. exports are applied.

⁸ Assumes U.S. trade with Canada and Mexico will be unaffected by the URA because of the NAFTA. Change in rate for Japan calculated from difference between the offer rate and the temporary rates currently applicable to U.S. exports.

negligible growth in the quantity of production and employment due to increased exports slightly outpacing negligible declines due to import growth, according to the Commission's sectoral model. U.S. consumers of these products are likely to experience some negligible decrease in the prices of U.S. and imported products, as the variety of competitively-priced products increases from GATT and non-GATT countries. No significant regional impact on U.S. production or employment is anticipated because of the URA.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committees with glass-producer representation indicated that their assessments of the URA would have to await their review of the final market-access agreements, viewed by the industry as the principal sector of the negotiations impacting these items. Based on preliminary data, the Industry Sector Advisory Committee on Building Products and Other Materials for Trade Policy Matters (ISAC 9) views the URA as making progress in several areas but achieving no important gains for the industry that they represent.¹⁰

⁹ USITC staff interviews with officials from the glass industry (Mar. 1994) yielded no statements of URA support or opposition. Two industry officials expect imports to benefit more than exports under the URA, while a third expects that the URA will not seriously affect his firm positively or negatively. With only one exception, industry officials agreed with the assessment of the Industry Sector Advisory Committee on Consumer Goods for Trade Policy Matters (ISAC 4) that market access was the most significant URA provision. The dissenting official believed that other provisions, such as countervailing measures, were more significant than market access.

¹⁰ *Report of the Industry Sector Advisory Committee on Building Products and Other Materials for Trade Policy Matters (ISAC 9) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 14, 1994, p. 1.

The Industry Sector Advisory Committee on Consumer Goods (ISAC 4) believes that the market-access negotiations of greatest concern to consumer-goods industries to date appear to be positive for ISAC 4 industries.¹¹ The URA report of ISAC 9 expressed some concern that the URA will weaken U.S. trade laws,¹² making it more difficult and costly to bring antidumping cases and making some cases non-actionable under the subsidies and countervailing measures agreement.

PPG Industries, Inc., Glass Group, a U.S. manufacturer of float glass and fabricated float glass products, supports the URA on balance, provided that a number of issues are addressed in legislation.¹³ PPG's particular concerns are related to antidumping, subsidy, and countervailing provisions,¹⁴ and maintenance of strong trade remedies, such as the section 301 provision and the section 337 provision of the Trade Act of 1974.

¹¹ *Report of the Industry Sector Advisory Committee on Consumer Goods for Trade Policy Matters (ISAC 4) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 14, 1994, p. 1.

¹² USITC staff interviews with officials from the glass industry (Mar. 1994) indicated the officials' agreement with the ISAC 9 position in two cases. Since the products covered in this sector have seldom been the subject of antidumping or countervailing investigations in recent years, GATT changes in these two areas appear unlikely to have a significant effect on the sector.

¹³ PPG Industries, Inc., Glass Group (Pittsburgh, PA), official submission to USITC, May 2, 1994.

¹⁴ PPG shares the concern of ISAC 9 that the URA may make it more difficult and costly to bring antidumping cases and may make some subsidies non-actionable.

CHAPTER 31

Industrial and Household Ceramicsⁱ

Table 31-1
Industrial and household ceramics: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	49	47	47	-4.1
Trade data (million dollars):				
Shipments	4,224	4,378	4,414	4.5
U.S. exports:				
Total	579	625	663	14.5
GATT ² signatories	509	545	595	16.8
Other	70	80	68	-2.4
U.S. imports:				
Total	1,657	1,874	1,961	18.4
GATT signatories	1,200	1,283	1,342	11.9
Other	457	591	619	35.4
U.S. trade balance:				
Total	-1,078	-1,249	-1,298	(³)
GATT signatories	-691	-738	-747	(³)
Other	-387	-511	-551	(³)
Consumption	5,303	5,627	5,712	7.7
Import market share (percent):				
Total	31.2	33.3	34.3	(³)
GATT signatories	22.6	22.8	23.5	(³)
Other	8.6	10.5	10.8	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The effect of the Uruguay Round Agreements (URA) on U.S. net trade, production, and employment,

¹ The following product groups are covered in the discussion of this industry sector: industrial ceramics; ceramic household articles; and metal and ceramic sanitary ware. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely

in the industrial and household ceramics sector likely will be negative, but negligible (1 percent or less) due to tariff reductions. The expected modest increase (over 5 percent to 15 percent) in total U.S. sector exports will be offset by the expected small increase (over 1 percent to 5 percent) in total sector imports because the value of U.S. imports is more than 3 times

²—Continued

impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. I and app. E.

as large as the value of U.S. exports. The impact of the URA on U.S. consumers likely will be small and positive.

The United States is a leading global producer of industrial and household ceramics, accounting for nearly 30 percent of worldwide production, valued at approximately \$15 billion in 1993.³ The U.S. industry's competitive position benefits from access to low-cost sources of raw materials and from development of newer, advanced materials. In addition, adoption of innovative process technologies has allowed U.S. producers to manufacture products that compete worldwide to meet the stringent specifications of principal end-users, such as the steel, machine tool, and aerospace/defense industries. The United States is also a leader in the manufacture of certain advanced industrial ceramics used in refractory and structural applications.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated tariff on U.S. sector imports from GATT countries equaled 7.7 percent ad valorem in 1993. Certain ceramic tableware and kitchenware, however, have ad valorem duties ranging from 13.5 to 35 percent. Under the URA, average ad valorem U.S. duties for the entire sector are to be reduced by an estimated 2.3 percentage points, and duties on tableware and kitchenware are to be reduced by 7 to 10 percentage points.

Ad valorem tariff rates on U.S. exports to principal GATT export markets range as high as 13.5 percent in the European Union (EU), from 20 to 35 percent in South Korea, and from 1.7 to 6.5 percent in Japan. The average calculated duty reduction in major GATT markets offered under the URA is an estimated 3.6 percentage points.

Other Provisions

No other provisions of the URA are expected to have a significant effect on this sector.

Likely Impact on U.S. Trade

Although the URA likely will result in a modest increase in exports contrasted with only a small increase in imports, the net effect on U.S. trade likely will be negative but negligible, according to the Commission's sectoral model. This is because U.S. export level are only about one-third the level of U.S. imports.

Total sector imports accounted for 34 percent of U.S. consumption in 1993 and imports from GATT countries totaled 23 percent of U.S. consumption.

³ Estimated from data from *Ceramic Industry*, Aug. 1993, and from industry contacts.

Nearly 32 percent of sector imports came from non-GATT countries in 1993 (principally China and Taiwan).⁴ However, U.S. tariff reductions under the URA will be extended to all countries with most-favored-nation (MFN) trade status. Sector imports from China increased from 10 percent in 1991 to 17 percent of total sector imports in 1993 and continued increases are anticipated, raising the proportion of U.S. imports from non-GATT countries.

Exports to GATT countries, principally Canada, Mexico, the EU, Hong Kong and South Korea, accounted for 90 percent of U.S. sector exports in 1993. The anticipated modest expansion in U.S. sector exports will not be entirely attributable to the URA, since 35 percent of U.S. exports in 1993 went to Canada and Mexico, whose tariffs are being reduced under the North American Free-Trade Agreement (NAFTA) provisions. No significant shift in export markets is expected due to the URA, as GATT nations are expected to continue to absorb the bulk of U.S. exports.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, the overall effect of the URA on U.S. industrial and household ceramic production and employment likely will be negative, but negligible, since increases in production and employment due to increased sector exports are expected to almost entirely offset decreases in production and employment due to increased sector imports.

The impact of the URA on U.S. consumers of these products is likely to be small, due to a negligible decrease in the price of U.S. products and a small fall in the prices of GATT and non-GATT imports. Increased imports from GATT countries may increase the variety of available products, contributing to the small gain by U.S. consumers.

U.S. Industry Positions on the URA

The Industry Advisory Sector Committee on Consumer Goods for Trade Policy Matters (ISAC 4),

⁴ Taiwan formally applied for accession to the GATT in 1990. A working party was established in Sept. 1992 to consider Taiwan's membership. The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

which includes the ceramic dinnerware industry, generally supports the tariff reductions negotiated under the URA.⁵

⁵ *Report of the Industry Sector Advisory Committee on Consumer Goods for Trade Policy Matters (ISAC 4) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 7, 1994, p. 7. U.S. International Trade Commission (USITC) staff interviews with officials from the American Restaurant and China Council and the Plumbing Manufacturers Association (Apr. 1994) indicated their agreement with the ISAC position.

CHAPTER 32

Non-Metallic Industrial Minerals¹

Table 32-1
Non-metallic industrial minerals: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	350	350	350	0.0
Trade data (million dollars):				
Shipments	44,000	47,000	50,000	13.6
U.S. exports:				
Total	2,337	2,668	2,388	2.2
GATTI signatories	2,190	2,485	2,214	1.1
Other	147	183	174	17.9
U.S. imports:				
Total	6,990	7,156	8,375	19.8
GATT signatories	6,848	6,978	8,135	18.8
Other	142	177	240	68.4
U.S. trade balance:				
Total	-4,653	-4,488	-5,987	(³)
GATT signatories	-4,658	-4,493	-5,921	
Other	5	6	-66	.3 ¹
Consumption	48,653	51,488	55,987	15.1
Import market share (percent):				
Total	14.4	13.9	15.0	(³)
GATT signatories	14.1	13.6	14.5	(³)
Other	0.3	0.3	0.4	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will result in a negligible increase (1 percent or less) in the

¹ The following product groups are covered in the discussion of this industry sector: clay and nonmetallic minerals and products, not elsewhere specified or included; certain miscellaneous minerals substances; certain nonmetallic minerals and articles; ceramic bricks and miscellaneous ceramic construction articles; ceramic floor and wall tiles; natural and synthetic gemstones; and abrasive and ferrous powders. See app. F, vol. II, for trade tables for this sector and these groups. •

U.S. net trade deficit in non-metallic industrial minerals, which could result in a negligible decrease in the value of production and employment for the sector. Any economic benefit to U.S. consumers is likely to be positive but negligible. Although the URA's effect is negligible for the sector overall, the ceramic tile industry is expected to show a modest increase (over 5

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

percent to 15 percent) in the industry's current trade deficit, resulting in a small decrease (over 1 percent to 5 percent) in domestic shipments and employment. Economic benefit to the ceramic tile consumer as a result of reduced tariffs and competitively priced imports is expected to be small as well. In addition to tariff reductions, the agreements on technical barriers to trade, preshipment inspection, import licensing, rules of origin, and trade-related investment measures (TRIMs) are important to products in this sector.

The United States is the world's largest producer of non-metallic industrial minerals, although not necessarily for each industry that composes this sector. U.S. production is estimated to account for about 10 percent of the value of world production and for 85 percent of U.S. consumption.

The majority of U.S. production is principally used in the construction materials industry, with lower domestic transportation costs and ready access to construction sites important competitive factors. Trade tends to be limited by the weight, bulk, and ubiquitous availability of many products, such as gravel, concrete blocks, and stone for building facings. As a result, most production and distribution centers are concentrated within a 200-mile radius of major metropolitan areas unless firms have easy access to water or rail transportation.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated tariff rate for U.S. imports of non-metallic industrial minerals from GATT countries was 1.6 percent ad valorem in 1993. Under the URA, the sector's negotiated U.S. tariff rates are to be reduced by 0.9 percentage point to a tariff rate of 0.7 percent. Ceramic tile tariff rates are among the highest within this sector; the current 19.1 percent average rate is to be reduced to 8.7 percent under the URA.³

For the industry sector overall, foreign tariff rates for U.S. exports to GATT countries range from 2 to 6 percent ad valorem in Japan, 10 to 70 percent in Korea, and 1 to 9 percent in the European Union (EU). Under the URA, the offered rates for these countries range

³ The ceramic tile industry is particularly concerned that the U.S.- negotiated GATT tariff rate of 8.7 percent will initially be lower than the agreement achieved under North American Free-Trade Agreement (NAFTA), which is scheduled to eliminate the current U.S. tariff rate with an initial 20 percent reduction in 1994 and then in equal annual stages over the next 15 years (C+ gradual staging for reduction of U.S. tariffs on Mexican tile imports). Under NAFTA, a 19.1-percent average tariff rate would not be reduced to the negotiated GATT tariff rate of 8.7 percent for about 6 years, in the year 2000.

from 2 to 3 percent in Japan, 1 to 20 percent in Korea, and 2 to 3 percent in the EU. Foreign tariff rates for the ceramic tile industry in Japan are currently 3 to 4 percent with no reduction offered under the URA; Korea's rate is currently 25 percent with an offer for rates of 13 to 25 percent; and the EU rates are currently 8 to 9 percent with an offer of 5 to 7 percent.

Other Provisions

Nontariff barriers (NTBs) are limiting factors for free market access for products like ceramic tile and gypsum products, such as acoustical ceiling systems. These NTBs include product standards and testing codes (technical barriers to trade),⁴ preshipment inspection,⁵ import licensing,⁶ rules of origin, / and domestic content issues (TRIMs).⁸ Agreements in these areas, to the extent that they open markets, would have a beneficial impact on U.S. exports that is comparable to that of tariff reductions.

Likely Impact on U.S. Trade

The URA are expected to cause a negligible increase in the deficit value of net trade, according to the Commission's sectoral model. The effect on U.S. imports for the overall sector likely will be small. The current weighted average tariff for U.S. imports is

⁴ Agreement on Technical Barriers to Trade, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks, among other things, to ensure that technical regulations and standards, and procedures for assessment of conformity with technical regulations and standards, do not create unnecessary obstacles to international trade.

⁵ Agreement on Preshipment Inspection (PSI), Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The Agreement seeks to ensure that PSI activities are carried out in an objective, uniform, and non-discriminatory manner that does not create trade barriers.

⁶ Agreement on Import Licensing Procedures (ILP), Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The Agreement seeks to ensure, *inter alia*, that import licensing procedures are transparent and applied in a fair and equitable manner, and are not utilized in a manner contrary to the principles and obligations of the GATT 1994.

⁷ Agreement on Rules of Origin, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement sets forth a timetable under which GATT rules of origin will be developed and implemented. The agreement establishes a working committee to consult with the Customs Cooperation Council, a non-GATT entity, in developing GATT rules of origin. The agreement is intended to ensure that such rules are clear and are applied in an impartial, transparent, predictable, consistent, and neutral manner.

⁸ Agreement on Trade-Related Investment Measures, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to minimize trade restriction and distortion by investment measures not previously covered by the GATT, such as local-content requirements, trade-balancing requirements, foreign exchange limitations, domestic sales requirements, and export performance requirements.

relatively low at 1.6 percent and a reduction of 0.9 percentage point is not expected to result in appreciable changes to trade patterns. In 1993, U.S. imports of \$8.4 billion accounted for an estimated 15 percent of the U.S. market.⁹ Imports of sectoral building construction materials accounted for an estimated 5 percent of the U.S. market, for which Canada, Italy, and the United Kingdom should continue to be the major import suppliers.

In contrast to the sector as a whole, the quantity of U.S. imports of ceramic tiles is expected to show a sizeable increase (over 15 percent). In 1993, U.S. imports of \$472 million accounted for an estimated 43 percent of the U.S. market. Italy, Spain, and Mexico¹⁰ will continue to be the major supply sources of foreign tiles, which are similar in quality and performance to those produced domestically, and which will be more readily available at competitive prices.

The URA should result in a negligible increase in the quantity of U.S. sector exports (1 percent or less). Canada and Mexico, which account for 30 percent of U.S. exports, already benefit from free or significantly reduced duties under the North American Free-Trade Agreement (NAFTA). U.S. exports currently account for only 5 percent of production. The majority of these products have high transportation costs, so only those producers with relatively easy access to rail and water transportation are likely to benefit from improved market access afforded by the URA. Foreign tariff reductions (which average 0.4 to 2 percentage points) are not likely to result in shifts in destination countries. Canada, Japan, and Mexico currently account for 44 percent of U.S. exports.

For ceramic tile, foreign tariff reductions (which averaged 6 percentage points) could equate to a modest (over 5 percent to 15 percent) increase in the quantity of exports, according to the Commission's sectoral model. However, this increase is predicated on reductions in NTBs. NTBs, such as arbitrary product standards, testing codes, and cartel behavior, have been problems in the past. U.S. exports of ceramic tile are likely to remain limited to current U.S. markets, including Canada, Mexico, Saudi Arabia, and the Bahamas.

⁹ Gemstone materials represented 69 percent of the value of imports (\$5.7 billion), of which 99 percent entered duty-free. Because U.S. production of gemstone material is very small, estimated at less than 1 percent of world production, the industry relies on imports to fulfill consumer demand.

¹⁰ Mexico is included as a factor in the URA effect because the negotiated tariff reduction for ceramic tile under NAFTA will not be equivalent to the 8.7 percent rate negotiated under GATT for about 6 years.

Likely Impact on U.S. Production, Employment, and Consumers

The URA are expected to have a negligible effect on the non-metallic industrial minerals sector, reducing the value of shipments and employment levels by less than 1 percent. Price reductions resulting from the URA are likely to be insignificant for the sector because the average tariff reduction (about 1 percentage point) will be shared by both supplier and consumer; therefore, any economic benefit to the consumer is likely to be negligible. For ceramic tile, the Commission's sectoral model indicates a small decrease in domestic shipments and employment levels and a small benefit to consumers.

Production facilities located along the coast and in the inner regions with relatively easy access to rail and water transportation services are likely to receive the greatest competition from increased imports. In the case of ceramic tile, an estimated 95 producers and 10,000 employees are located primarily along the coastal and southern borders and the Mississippi River regions. Producers in Texas, California, North Carolina, and Tennessee are likely to experience the greatest impact from increased imports.

U.S. Industry Positions on the URA

Industry representatives for the sector (Industry Sector Advisory Committee on Building Products and Other Materials (ISAC 9)) support the concept of the URA, seeing it as an instrument to expand markets, source raw materials, and improve the world trading system. However, they express concern that reduced U.S. tariffs for these product groups are not matched with equally low tariff rates in foreign markets, making it difficult to trade domestically produced goods that are homogenous in quality and performance with foreign counterparts that are purchased on the basis of price." They are further concerned that the agreement on antidumping will make it more difficult to bring dumping cases before the U.S. Government.¹²

Representatives of domestic ceramic tile manufacturers maintain that proposed URA reductions in U.S. tariff levels for ceramic tile will cause serious

II Report of the Industry Sector Advisory Committee (ISAC 9) on Building Products & Other Materials for Trade Policy Matters on the Uruguay Round of Multilateral Trade Negotiations, Jan. 14, 1994.

¹² Recent Commission-instituted antidumping investigations pertaining to this sector include the following: U.S. International Trade Commission (USITC), Gray Portland Cement and Cement Clinker, investigation Nos. 731-TA-451 (Mexico, 1990), 731-TA-461 (Japan, 1991), and 731-TA-519 (Venezuela, 1991); USITC, Nepheline Syenite, investigation No. 731-TA-525 (Canada, 1992); and USITC, Crushed Limestone, investigation No. 731-TA-562 (Mexico, 1992).

injury to the industry, with no offsetting benefits.¹³ The industry reports that imports accounted for approximately 55 percent of domestic tile consumption **in 1993 (in terms of quantity) and that higher-than-anticipated tariff reductions under the URA will have a devastating cumulative effect when added to low duty rates that are already in effect under other preferential duty programs.** Representatives state that the industry is relatively capital intensive with high fixed costs, and that increased imports as a result of the URA will deter future investment necessary to

¹³ Tile Council of America, Inc. (Washington, DC), official submission to USITC, May 2, 1994.

keep the industry competitive. Moreover, no increased access to foreign markets is believed to be likely as a result of the URA. Industry representatives also suggest that negotiated tariff reductions are unlikely to benefit U.S. consumers for two reasons: (1) increased imports will reduce U.S. production, resulting in less incentive for importers to pass on the benefit of reduced tariffs and limiting choices available to consumers; and (2) since installation costs of ceramic tile are often higher than the cost of the tile itself, even a large percentage reduction in the cost of tile would likely result in only a minor price reduction for the consumer.

CHAPTER 33

Steelmaking Raw Materials¹

Table 33-1
Steelmaking raw materials: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	60	57	57	-5.0
Trade data (million dollars):				
Shipments	16,034	16,180	16,600	3.5
U.S. exports:				
Total	1,503	1,412	1,593	6.0
GATT ² signatories	1,362	1,315	1,451	6.5
Other	141	97	142	0.8
U.S. imports:				
Total	1,550	1,486	1,571	1.4
GATT signatories	1,447	1,385	1,386	-4.2
Other	102	102	185	81.3
U.S. trade balance:				
Total	-47	-76	22	(³)
GATT signatories	-85	-71	65	(³)
Other	39	-5	-43	(³)
Consumption	16,081	16,256	16,578	3.1
Import market share (percent):				
Total	9.6	9.2	9.5	(³)
GATT signatories	9.0	8.5	8.4	(³)
Other	0.6	0.6	1.1	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The overall effects of the Uruguay Round Agreements (URA) on trade, production, and

¹ The following product groups are covered in the discussion of this industry sector: ferroalloys; primary iron products; iron ores and concentrates; and iron and steel waste and scrap. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely

employment for steelmaking raw materials are likely to be negligible but positive, because no U.S. tariffs and few foreign tariffs on these products are to be reduced as a result of URA negotiations and no other provisions are expected to significantly affect this sector. The bulk of these products already enter the United States duty-free; the remainder are assessed relatively low duties.

²—Continued

impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

The United States is among the world's largest producers of steelmaking raw materials. Although the U.S. sectoral competitive position in the world market remained virtually unchanged during 1991-93, significant restructuring, consolidation, and rationalization of facilities during the 1980s had resulted in an internationally competitive sector by the early 1990s. Import market shares over the period were relatively low (less than 10 percent) and steady. As higher prices took effect during the period, the value of U.S. exports increased and the trade balance shifted from a slight deficit to a slight surplus by the end of the 1991-93 period. U.S. exports accounted for about 10 percent of production. Other world leaders in production of these sector products (many of which are also principal U.S. suppliers) include Russia, Brazil, Australia, South Africa, Canada, China, and Venezuela.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The current calculated import duty rates of 2.4 percent ad valorem (ferroalloys) and 0.002 percent ad valorem (certain iron and steel waste and scrap products) were not affected by the URA. Remaining sector products currently enter the United States duty-free. Korea, Canada, Turkey, Japan, and Mexico were the largest U.S. export markets in 1993. Exports to Canada and Mexico, which will be unaffected by the URA, amounted to 30 percent of the total value of exports in 1993. Although Korea's tariffs on these products range from zero to 20 percent and Japan's tariffs range from zero to 6 percent, most U.S. exports enter duty-free. Both Korea and Japan have agreed to reduce all their tariffs in this sector to zero. Turkey's tariffs currently range from 10 to 30 percent, and are offered at a range of 5 to 30 percent.

Other Provisions

No other provisions are expected to have a significant effect on this sector.

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the URA likely will have a negligible positive effect on U.S. net trade. U.S. sector tariffs will remain unchanged and are already low, so there will be no effect on imports. Most foreign tariffs are low or already zero, so exports likely will increase only negligibly.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, the URA likely will have a negligible positive impact on U.S. production and employment, resulting from the negligible increase in exports. No change is expected in imports and there likely will be no effect on consumers.

U.S. Industry Positions on the URA

On balance, the industry supports the URA on the condition that satisfactory implementing legislation is achieved, especially with respect to U.S. statutes related to subsidies, antidumping,³ dispute settlement, and section 301.⁴

³ Recent Commission-instituted antidumping investigations pertaining to this sector include the following: U.S. International Trade Commission (USITC), Ferrosilicon, investigation Nos. 731-TA-565 (Argentina, 1992), 731-TA-566 (Kazakhstan 1993) 731-TA-567 (China, 1993), 731-TA-568 (Russia, 1993), 731-TA-569 (Ukraine, 1993), 731-TA-570 (Venezuela, 1993), 731-TA-641 (Brazil, 1993), and 731-TA-642 (Egypt, 1993); and USITC, Silicomanganese, investigation Nos. 731-TA-671 (Brazil, 1993), 731-TA-672 (China, 1993), 731-TA-673 (Ukraine, 1993), and 731-TA-674 (Venezuela, 1993).

⁴ Report of the Industry Sector Advisory Committee (ISAC 7) on Ferrous Ores and Metals on the Uruguay Round of Multilateral Trade Negotiations, Jan. 14, 1994.

CHAPTER 34

Basic Iron and Steel Products¹

Table 34-1
Basic iron and steel products: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	193	176	168	-13.0
Trade data (million dollars):				
Shipments	55,900	56,000	59,500	6.4
U.S. exports:				
Total	3,719	3,073	2,840	-23.6
GATT ² signatories	3,373	2,790	2,560	-24.1
Other	346	283	279	-19.2
U.S. imports:				
Total	7,936	7,980	8,727	10.0
GATT signatories	7,806	7,889	8,543	9.4
Other	130	92	184	41.5
U.S. trade balance:				
Total	-4,217	-4,907	-5,887	(³)
GATT signatories	-4,433	-5,099	-5,983	(³)
Other	216	191	95	(³)
Consumption	60,117	60,907	65,387	8.8
Import market share (percent):				
Total	13.2	13.1	13.3	(³)
GATT signatories	13.0	13.0	13.1	(³)
Other	0.2	0.2	0.3	(³)

¹ Shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce

Summary of Sector Analysis² and U.S. Competitive Position

Overall changes in tariffs on basic iron and steel products under the Uruguay Round Agreements (URA)

The following product groups are covered in the discussion of this industry sector: steel mill products (semifinished and flat-rolled steel products, bars, rods, angles, shapes, sections, wire, rails, pipes, tubes and fittings) and iron construction castings. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely

are expected to have a negligible negative impact (1 percent or less) on net trade, production, and employment, and a negligible positive impact on prices to consumers. Benefits to the sector are likely to occur through increased exports by steel consumers, such as farm equipment manufacturers and other manufacturers of heavy equipment, because of reduced tariffs for U.S. exports of these products under the URA. The impact of antidumping (AD) and

²—Continued

impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

countervailing duty (CVD) provisions on both sector industries and their customers depends on how implementing legislation affects the administrative procedures required to obtain AD and/or CVD duties on unfair imports in addition to any regular duties.³ Also of some significance is the agreement on safeguards, which would eliminate the use of voluntary restraint agreements (VRAs).

The U.S. steel industry has improved its competitive position substantially in recent years, with investments in restructuring, modernization, and technology totalling \$35 billion since 1980. During this period, the industry increased its ability to compete by more than doubling labor productivity, lowering other production costs, improving quality and service, and activating product-development programs aimed at improving competitiveness with both imports and other materials (i.e. plastics, aluminum, and wood). As a result, U.S. producers reportedly have become the reliable, low-cost supplier of quality steel products to the U.S. market.⁴ The industry was assisted by 7-1/2 years of VRAs that limited steel exports to the United States. After expiration of the VRA program in 1992, a large number of unfair trade petitions were filed that ultimately resulted in additional duties being placed on many U.S. steel imports. Overall, sector imports now account for approximately 13 percent of consumption by value, down considerably from the early 1980s.

Even with improvements in international competitiveness, the industry continues to focus on the U.S. market. U.S. exports account for less than 5 percent of shipments by quantity, compared with 21 to 23 percent in Japan and the European Union (EU) in recent years and the 18 percent global industry average. Although the United States accounts for 12 percent of world raw steel production, U.S. exports account for only 0.5 percent of world consumption.⁵

³ There have been large numbers of recent Commission-instituted antidumping and countervailing investigations on products in this sector including butt-weld pipe fittings, pipes and tubes, bars, flat-rolled products, flanges, wire rod, and angles. For a complete list of recent investigations, see U.S. International Trade Commission (USITC), *Steel Semiannual Monitoring Report* (investigation No. 332-327), USITC publication 2759, Apr. 1994.

⁴ Andrew Sharkey, President, American Iron and Steel Institute, Speech to Ohio legislators, Mar. 14, 1994.

⁵ Derived from International Iron and Steel Institute statistics; and USITC, *Steel Semiannual Monitoring Report* (investigation No. 332-327), USITC publication 2682, Sept. 1993.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions⁶

The current trade-weighted average U.S. tariff for sectoral products is 5.2 percent, with certain product areas having higher tariffs, notably carbon steel cold-rolled finished bars (7.5 percent) and specialty steel products (8.2 percent). Imports of cast-iron products, which account for approximately 1 percent of the sector's total trade, enter the United States duty-free.

The United States, together with the EU, Japan, Korea, Canada, Austria, Sweden, Finland, and Norway, has agreed to eliminate tariffs on steel products over a 10-year period under a zero-for-zero agreement.⁷ Although Mexico did not agree to steel tariff eliminations in the URA, staged steel tariff elimination for U.S. products is already provided for under the North American Free-Trade Agreement (NAFTA). Countries agreeing to steel tariff elimination under the URA or NAFTA, collectively account for 77 percent of U.S. imports by value, and are the markets for 75 percent of the value of U.S. exports in this sector.

In contrast to the range of U.S. steel tariffs (zero to 11.6 percent), steel tariffs of certain major trading partners cover narrower ranges; zero to 8.2 percent in Japan, zero to 10 percent in the EU, and 10 to 20 percent in Korea.

Other Provisions

Since the expiration of the VRAs on steel trade that limited steel exports to the United States, the U.S. steel industry has sought and obtained relief under the AD and CVD laws. URA provisions relating to AD⁸ and CVD⁹ actions provide for, among other things, new

⁶ Negotiations for a Multilateral Steel Agreement (MSA) to eliminate tariffs, subsidies, and other trade distorting measures in the steel industry are not concluded, and therefore an MSA is not part of the URA. However, certain MSA commitments have been incorporated into the URA, including agreements to eliminate steel tariffs between major steel traders and to prohibit voluntary export agreements on steel trade.

⁷ Also included in the tariff elimination agreement were steel products in the Fabricated Metal Products sector (ch. 35), including steel structurals, wire products, and nails.

⁸ Agreement on Implementation of Article VI of GATT 1994, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement sets forth rules that govern the application of article VI of the GATT 1994 relating to the imposition of antidumping measures.

⁹ Agreement on Subsidies and Countervailing Measures, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement defines prohibited, actionable, and non-actionable subsidies; and sets forth rules for imposition of countervailing measures in accordance with article VI of the GATT 1994 with respect to goods benefiting from prohibited or actionable subsidies.

definitions of "de minimis margins" and "negligible imports" for purposes of terminating investigations and a 5-year "sunset" on AD and CVD orders unless certain determinations are made upon review. All current AD and CVD orders, about one-fourth of which involve steel products, would be subject to review under these sunset provisions, in a manner to be defined in the implementing legislation. The URA provisions also define a subsidy and provide, for the first time, three areas of nonactionable subsidies.¹⁰ Generally, however, state assistance given to a specific firm to build a new steel plant in a particular state or area would continue to be actionable, as would other domestic subsidies if there is a determination of material injury or threat of material injury to the steel industry of the importing country. The new agreements would prohibit export subsidies, making them actionable without the injury determination now required.

Under URA provisions to address emergency actions (i.e. safeguards¹¹), countries have agreed not to seek, take, or maintain any voluntary export restraints in response to increases in overall imports in a product area. In general, VRAs like those on steel exports to the United States during 1984 to 1992 will no longer be a trade option.

Under URA government procurement provisions,¹² the United States opened certain non-defense Federal construction projects to foreign bidding, eliminating the 6- to 12-percent bid preference for U.S. bidders. Changes from the current code are expected to increase the eligibility of U.S. firms to bid on foreign procurement contracts. As a result, materials sourcing, including iron and steel products, should be less restricted.

¹⁰ According to the executive summary of the results of the Uruguay Round, nonactionable subsidies include certain assistance for research and predevelopment activity, limited to 75 and 50 percent of costs, respectively; certain assistance to disadvantaged regions; and certain assistance to adapt existing facilities to meet new environmental standards, limited to 20 percent of the costs.

¹¹ Agreement on Safeguards, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to clarify and reinforce the disciplines of GATT article XIX (Emergency Action on Imports of Particular Products), to re-establish multilateral control over safeguards and eliminate measures that escape such control, and to recognize the importance of structural adjustment by industries during the period that a safeguard measure is in effect.

¹² Agreement on Government Procurement, Annex 4B, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. A revised text is expected to enter into force January 1, 1996. The revised text seeks to increase transparency in the laws, regulations, procedures, and practices relating to government procurement and seeks to ensure that they are not used as barriers to trade. Negotiations to expand coverage to subcentral governments and government-owned utilities will continue with the European Union (EU), Japan, and Canada.

Likely Impact on U.S. Trade

Overall changes in sector tariffs under the URA are likely to result in a negligible increase in the trade deficit. Although the Commission's sectoral model suggests a small (over 1 percent to 5 percent) increase in sector imports as a result of the URA, steel tariff reductions will take place over a 10-year period, during which domestic product differentiation and specialization in the steel area are expected to continue increasing, thereby lowering the impact of tariff changes. In addition, many large customers, notably automotive manufacturers, are making an effort to develop North American, rather than offshore, sources that can meet their specialized steel requirements.

On the export side, a small overall increase in U.S. steel exports is predicted by the Commission's sectoral model. However, over 65 percent of current exports are directed to Mexico and Canada. As a result, a negligible (1 percent or less) increase in exports is expected as a result of URA tariff changes. The sector also is expected to benefit from expected increased export sales by its customers, notably those manufacturing agricultural and other heavy equipment, which will in turn increase the domestic demand for steel.

In areas outside of market access, changes in the AD and CVD provisions may have a considerable impact on trade, depending upon the U.S. implementing legislation. Specific implementing legislation is being advocated by steel producers (see "U.S. Industry Positions on the URA") to enhance the industry's ability to win unfair trade cases.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral models, reductions in the sector's tariffs under the URA are expected to have a negligible negative impact on U.S. production and employment. Likewise, reductions in steel tariffs are expected to have a negligible positive impact on U.S. customers. However, reductions in tariffs on finished products, such as agricultural equipment, by foreign countries may be much greater, and may have a somewhat larger, positive impact on the U.S. steel industry.

The impact of the URA AD and CVD provisions on production and employment depends on the implementing legislation and the resulting impact on trade. Given that imports account for 13 percent of the sector by value, a sizeable (over 15 percent) decrease or increase in imports may result in a modest (over 5 percent to 15 percent) impact on production and employment in the steel industry and a modest to sizeable price impact on consumers importing specialized products.

U.S. Industry Positions on the URA ¹³

Industry officials state that the URA, on balance and taken as a whole, will be "satisfactory." They condition support of the agreements, including the tariff protocol, on the passage of satisfactory implementing legislation in the United States. Some sectors of the steel industry, however, notably specialty steel producers and cold-rolled finished steel bar producers, do not support the tariff protocol, indicating that there will be tariff discrimination by those countries that are not eliminating their own steel tariffs. These producers also note that a Multilateral Steel Agreement (MSA) to eliminate global subsidies and other trade-distorting practices was not achieved.¹⁴ On the other hand, producers of welded carbon steel tubular products support the tariff protocol because they argue it will enhance access to export markets and correct an existing tariff inversion whereby flat-rolled inputs are subject to higher tariffs than finished pipe, encouraging imports of the more advanced product. Steel service centers expressed concern over the loss of preferential zero steel tariffs for U.S. exports obtained under the U.S.-Canada Free Trade Agreement; zero duties will be available to all steel exports from GATT countries to Canada under the 10-year tariff phase-out provisions of the URA.

Many industry members consider that the URA AD and CVD provisions will have a greater potential

¹³ Based on USITC staff interviews with representatives of the American Iron and Steel Institute, Mar. 22, 1994; the Steel Manufacturers Association, Mar. 21, 1994; the Committee on Pipe and Tube Imports, Mar. 14, 1994; the Specialty Steel Industry of the United States, Mar. 22, 1994; the Cold Finished Bar Institute, Mar. 23, 1994; and the Steel Service Center Institute, Mar. 14, 1994; *Report of the Industry Sector Advisory Committee (ISAC 7) on Ferrous Ores and Metals for Trade Policy Matters on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994; and other ISAC 7 written submissions.

¹⁴ Cold Finished Steel Bar Institute (Washington, DC), official submission to USITC, Apr. 29, 1994; and Specialty Steel Industry of the United States, Specialty

Tubing Group (Washington, DC), official submission to USITC, May 2, 1994.

impact on the industry (by lessening or enhancing its ability to obtain AD and/or CVD duties) than any other provisions. Some steel industry segments, such as the Steel Manufacturers Association, argue that implementing legislation should only seek changes in U.S. trade laws that are inconsistent with the URA. Others, however, including integrated steel producers, pipe producers, and specialty steel producers advocate changes that go further than conformity. According to specialty producers, implementing legislation should add provisions that go beyond the issues specifically addressed in the GATT agreement to improve the opportunity for American industries and their workers to obtain redress from unfair trade practices.¹⁵ Integrated producers advocate an implementing bill that achieves similar objectives and also closes perceived loopholes in existing U.S. law and practice.¹⁶ Steel service centers, however, note that U.S. AD and CVD laws are used as models for laws in Mexico and other countries and therefore some of the changes advocated by the U.S. industry may make it more difficult avoid the imposition of AD and CVD duties against U.S. exports in other countries in the future.¹⁷

With regard to the new URA safeguard provisions that preclude the use of VRAs, industry officials in general state that although they are not opposed to the safeguards agreement in general, no policy option should be foreclosed. With respect to URA government procurement provisions, industry officials are hopeful that expansion of the code will rectify the past imbalance of obligations by improving export opportunities, transparency, and effectiveness of bidding procedures.

¹⁵ Robert Heaton, Chairman of the Board of Directors, Specialty Steel Industry of the United States, testimony before the Committee on Ways and Means, Subcommittee on Trade, U.S. House of Representatives, Feb. 8, 1994.

¹⁶ Curtis Barnette, Chairman of Bethlehem Steel, on behalf of the American Iron and Steel Institute, testimony before the Committee on Finance, U.S. Senate, Mar. 23, 1994.

¹⁷ Charles Blum, counsel for Steel Service Center Institute, USITC staff telephone interview, Mar. 14, 1994.

CHAPTER 35

Fabricated Metal Products¹

Table 35-1
Fabricated metal products: U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	944	902	904	-4.2
Trade data (million dollars):				
Shipments	116,037	117,613	120,013	3.4
U.S. exports:				
Total	8,952	9,826	10,156	13.4
GATT ² signatories	8,119	9,002	9,124	12.4
Other	833	824	1,033	24.0
U.S. imports:				
Total	9,310	9,912	11,140	19.7
GATT signatories	7,185	7,445	8,364	16.4
Other	2,125	2,466	2,775	30.6
U.S. trade balance:				
Total	-358	-86	-984	(³)
GATT signatories	934	1,557	760	(³)
Other	-1,292	-1,642	-1,743	(³)
Consumption	116,395	117,699	120,997	4.0
Import market share (percent):				
Total	8.0	8.4	9.2	(³)
GATT signatories	6.2	6.3	6.9	(³)
Other	1.8	2.1	2.3	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The overall effects of the Uruguay Round Agreement (URA) tariff reductions are expected to

¹ The following product groups are covered in the discussion of this industry sector: steel pipe and tube fittings, and certain cast products; fabricated structurals; metal construction components; metallic containers; wire products of iron, steel, aluminum, copper, and nickel; chain; industrial fasteners of base metal; cooking and kitchen ware; nonpowered handtools; cutlery other than tableware, certain sewing implements, and related

have a small (over 1 percent to 5 percent) positive impact on U.S. imports and exports. However, since

1—Continued

products; certain builders hardware; miscellaneous products of base metal; and arms and ammunition. See app. F, vol. H, for the trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

the value of U.S. imports exceeds that of exports and both are expected to increase at about the same level, the URA likely will have a negligible negative impact (1 percent or less) on the trade balance, and on production and employment. The URA likely will have a negligible positive impact on consumers. In addition to tariff reductions, the antidumping agreement may affect this sector.

The U.S. fabricated metal products industry, which accounts for an estimated 15 percent of world production of these products, made significant efforts to improve its overall competitive position during 1991-93. These efforts are reflected in the technological advancements, restructuring endeavors, and capital investments (an estimated \$1 billion annually) made during the period. Certain major sector industries (builders hardware, metallic containers, nonpowered handtools) made substantial investments in foreign affiliated operations to enhance their ability to compete domestically and abroad.

U.S. exports are important to sector industries as a means of balancing fluctuations in demand and alleviating aggressive import-pricing practices in domestic markets. Although significant efforts have been undertaken to enhance exports, the U.S. market continued to be the principal consumer of domestic production during 1991-93. Total exports registered a 13-percent increase during the period and accounted for 8 percent of total shipments in 1993. U.S. imports rose by 20 percent and accounted for 9 percent of domestic consumption in 1993.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The trade-weighted average U.S. tariff for sector products is 4.7 percent ad valorem. For certain major U.S. trading partners, ad valorem tariffs range from 3 percent for the European Union (EU) to 14.5 percent for Korea.

In the market access negotiations of the URA, the United States, together with the EU, Japan, Korea, Austria, Sweden, Finland, and Norway agreed to eliminate tariffs on certain fabricated metal products (steel structurals and steel wire products) over a 10-year period under a zero-for-zero agreement.

Other Provisions

During the last decade, certain sector industries used the antidumping statute to obtain relief from unfair foreign competition.³ New provisions of the

³ Recent Commission-instituted antidumping investigations pertaining to this sector include the following: U.S. International Trade Commission (USITC),

URA,⁴ including the sunset provisions and those that define in much greater detail the methodology investigating authorities may apply in conducting antidumping investigations, may affect the ability of these industries to obtain and retain relief from unfair imports.

Likely Impact on U.S. Trade

Tariff reductions on fabricated metal products resulting from the URA are expected to result in small increases in U.S. imports and exports according to the Commission's sectoral model. The relatively low calculated duty reduction of 1.9 percent ad valorem is not expected to result in noticeable changes in trade patterns. The U.S. market likely will continue to be supplied by traditional suppliers, particularly Japan, Canada, and non-GATT supplier Taiwan. It is unlikely that other countries will realize more than a negligible increase in shipments to the U.S. market as a result of the URA. The effect of the URA on U.S. exports will be limited because Mexico and Canada (which accounted for 45 percent of total U.S. exports in 1993) have already reduced their tariffs under the North American Free-Trade Agreement (NAFTA). These markets are expected to remain the focus of U.S. exports.

In contrast to the sector as a whole, the calculated duty reduction of 4.4 percentage points for wire products likely will result in a modest increase (over 5 percent to 15 percent) in the quantity of U.S. imports and exports of wire products of iron or steel. However, the effects of the URA likely will be negligible but negative for this industry.

Likely Impact on U.S. Production, Employment, and Consumers

URA tariff reductions are expected to have a negligible negative impact on the sector as a whole, reducing U.S. production and employment levels by less than 1 percent. Decreases in production and

³— *Continued*

Paper Clips, investigation No. 731-TA-663 (China, 1993); USITC, Fabricated Structural Steel, investigation No. 731-TA-387 (Canada, 1988); and USITC, Steel Wire Rope, investigation Nos. 701-TA-305, 731-TA-478 (India, 1991), 731-TA-477 (Chile, 1990), 701-TA-306, 731-TA-477 (Israel, 1990), 731-TA-476 (Argentina, 1991), 731-TA-479 (Mexico, 1991), 731-TA-524 (Canada, 1991), 731-TA-480 (China, 1991), 731-TA-481 (Taiwan, 1991), 731-TA-482 (Thailand, 1991), 731-TA-546 (Korea, 1993), 731-TA-547 (Mexico).

⁴ Agreement on Implementation of Article VI of GATT 1994, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement sets forth rules that govern the application of article VI of the GATT 1994 relating to the imposition of antidumping measures.

employment due to increased imports will be largely offset by increased exports. Price reductions resulting from the URA are likely to be very small for the sector overall because the average tariff reduction will be shared by both supplier and consumer; any economic benefit to the consumer is likely to be negligible but positive.

U.S. Industry Positions on the URA⁵

The proposed reduction in tariffs under the URA is generally supported by the fabricated metal products sector, provided that comparable tariff reductions are achieved in foreign markets and satisfactory legislation is implemented regarding antidumping, subsidies, dispute settlement, and section 301. However, some sector industries, such as builder's hardware, are fearful that certain foreign tariff reductions will be inadequate and will continue to leave U.S. exporters at a disadvantage.

⁵ Based on information from Membership Director, Wire Reinforcement Institute (Leesburg, VA), official submissions to USITC, Mar. 31, 1994; *Report of the Industry Sector Advisory Committee (ISAC 7) on Ferrous Ores and Metals for Trade Policy Matters on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994; and *Report of the Industry Sector Advisory Committee (ISAC 9) on Building Products and Other Materials for Trade Policy Matters on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

PART VI
LIKELY IMPACT OF THE URA ON U.S.
MACHINERY AND TRANSPORTATION
SECTORS

Summary of the Likely Impact of the URA on U.S. Machinery and Transportation Sectors

- The U.S. machinery and transportation sectors covered in detail in this report include motor vehicles, motor vehicle parts, aerospace equipment and parts, certain transportation equipment, metal and wood working equipment, industrial machinery, electrical equipment and components, appliances, and miscellaneous equipment.
- U.S. machinery and transportation sectors are generally highly competitive internationally. Major global competitors in most of these sectors include Europe and Japan.
- Tariffs in the machinery and transportation sector in U.S. and foreign markets are generally low. A substantial amount of sector trade is subject to zero or reduced duties under the North American Free Trade Agreement. In addition, trade in certain sectors is subject to zero duties under the Automotive Products Trade Act of 1965 (motor vehicles and motor vehicle parts) and the Agreement on Trade in Civil Aircraft (aerospace equipment and parts). Non—GATT countries, principally China and Taiwan, account for a significant amount of trade in certain sectors, particularly metal and wood working equipment and electrical equipment and components.
- Tariff reductions under the Uruguay Round Agreements (URA) are generally minor. Certain machinery and transportation sectors will be subject to the complete elimination of tariffs. Sectors subject to zero—for—zero agreements include wrapping, packaging, and can—sealing machinery; forklift trucks; certain farm and garden equipment; certain pulp, paper, and paperboard machinery; and certain construction, mining, and mineral processing equipment.
- While most gains likely will be due to tariff reductions, other URA provisions may also benefit certain machinery and transportation sectors. The agreement on subsidies and countervailing measures, for example, allows nonactionable government subsidies for research and development below certain levels; this may be advantageous for certain segments of the aerospace and transportation sectors. Agreements that improve procedures for preshipment inspection and government procurement are likely to contribute to increased U.S. exports of industrial machinery and electrical equipment and components.
- U.S. machinery and transportation sectors are expected to benefit overall from the URA. The trade balance in these sectors is expected to improve by negligible to small amounts (5 percent or less), with increases in exports generally larger than increases in imports; the trade balance for electrical equipment and components is expected to increase modestly (over 5 percent to 15 percent). As a result of increased trade, U.S. production and employment in machinery and transportation sectors is expected to increase by negligible to small amounts. U.S. consumers of sector products are expected to experience negligible to small gains under the URA due to lower prices.

CHAPTER 36

Motor Vehicles¹

Table 36-1
Motor vehicles: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	218	219	210	-3.7
Trade data (million dollars):				
Shipments	133,861	144,200	161,500	20.6
U.S. exports:				
Total	15,385	17,679	18,555	20.6
GATT ² signatories	13,143	13,930	14,709	11.9
Other	2,242	3,749	3,846	71.6
U.S. imports:				
Total	58,833	60,376	68,607	16.6
GATT signatories	58,813	60,375	68,605	16.7
Other	20	1	2	-90.4
U.S. trade balance:				
Total	-43,447	-42,697	-50,052	(³)
GATT signatories	-45,669	-46,445	-53,896	(³)
Other	2,222	3,748	3,844	71.6
Consumption	177,308	186,897	211,552	19.3
Import market share (percent):				
Total	33.2	32.3	32.4	(³)
GATT signatories	33.2	32.3	32.4	(³)
Other	(⁴)	(⁴)	(⁴)	(⁴)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

⁴ Less than 0.05 percent.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will have a small positive impact (over 1 percent to 5

¹ The following product groups are covered in the discussion of this industry sector: passenger automobiles, trucks, and buses. See app. F, vol. II, for trade tables for this sector.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely

percent) on U.S. motor vehicle exports to GATT countries, and a negligible positive impact (1 percent or less) on U.S. imports, resulting in a small positive effect on the net trade balance. The URA are also likely to have a positive negligible effect on U.S. consumers, production, and employment in the U.S. motor vehicle sector. Tariff reductions are the most important URA provision for this sector.

²—Continued
impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

The U.S. motor vehicle industry is highly competitive in North America and Europe,³ which are two of the three largest regional markets in the world. The United States accounts for approximately 20 percent (about 10 million vehicles) of annual global motor vehicle production, and is the second largest producer after Japan, which produces approximately 12 million vehicles per year.⁴ Motor vehicle production in the United States is concentrated in the Midwest, particularly Michigan, Ohio, Illinois, and Missouri.

In North America, which is widely regarded as the most competitive and demanding market in the world, U.S. motor vehicle producers account for approximately 75 percent of the market.⁵ In Western Europe, U.S. automobile and light truck companies account for over 20 percent of the market,⁶ whereas U.S. producers of other types of motor vehicles (medium and heavy trucks, and buses) have only a limited share of the market. Developing countries have become more important to the sales efforts of U.S. motor vehicle producers, with the main focus placed on markets in Latin America and Asia. U.S. motor vehicle producers are competitive in Latin American markets, but generally have only a small share of Asian markets, which tend to be dominated by Japanese companies.⁷

Since the 1980s, the U.S. motor vehicle industry, and particularly the automobile and light truck segment, has been restructuring, primarily as a result of intense competitive pressure from Japanese firms. The U.S. industry has made significant improvements in efficiency, product design, and quality, and has effectively narrowed the competitive gap with Japan. The U.S. industry's most formidable competitors in the North American market are Japan, for automobiles, and Europe, for heavy trucks. In the light truck segment, U.S. producers face relatively weak competition from foreign producers.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The current average calculated U.S. tariff rate for motor vehicles is 3.2 percent ad valorem, which is to be reduced by only 0.01 percentage point under the URA. Approximately 41 percent (\$27.8 billion) of total U.S. motor vehicle imports in 1993 were from Japan, nearly all of them passenger cars. Japan

³ U.S. motor vehicle firms serve the European market primarily from assembly plants in Europe.

⁴ Automotive News Market Data Book 1993, Automotive News, May 26, 1993, p. 3.

⁵ Automotive News, Jan. 10, 1994, p. 49.

⁶ Ward's Automotive International, Feb. 1994, p. 11.

⁷ U.S. motor vehicle firms' Asian market presence is most notable in China and Taiwan, where they have significant local assembly of automobiles and light trucks. Japan is the largest single market for motor vehicles in Asia.

represents the most serious competitive challenge to the U.S. passenger car industry, and holds a 19 percent share of the U.S. market for that segment of the industry. Japanese companies account for over 29 percent of the U.S. passenger car market when production from their U.S. and Canadian assembly plants is included in their market share.

About 38 percent of total U.S. imports of motor vehicles (\$26.3 billion) were from Canada in 1993; most of these imports were passenger cars and light trucks.⁸ While imports from Canada are relatively large, they primarily represent shipments from subsidiaries of the U.S.-owned Big Three automobile companies (General Motors, Ford, and Chrysler).

About one-half of total U.S. motor vehicle exports are to Canada (\$9.3 billion in 1993). Saudi Arabia, Taiwan, and Japan were the next most important export markets, with between \$1.4 billion and \$1.1 billion in U.S. export sales in 1993. Both Saudi Arabia and Taiwan have significant tariffs (12 percent, and 30 to 42 percent ad valorem, respectively) on motor vehicles.⁹ Taiwan is not a member of GATT.¹⁰ There are no Japanese tariffs on motor vehicles.¹¹

The United States exports less than \$1 billion of motor vehicles to all other markets, and only Germany, China, and Hong Kong receive U.S. exports of motor vehicles worth over \$500 million. The German (European Union) tariff is 10 percent for automobiles and 22 percent for trucks.¹² The European Union (EU) agreed to tariff cuts for motor vehicles of about 2.4 percentage points under the URA. The Chinese tariff on motor vehicles is 180 percent for automobiles, and 50 percent for trucks. China is not a member of GATT.¹³

Other Provisions

No other URA provisions are expected to have a significant effect on this sector.¹⁴

⁸ Nearly all U.S.-Canadian motor vehicle trade is duty free, primarily under the Automotive Products Trade Act of 1965 (APTA) and the North American Free-Trade Agreement (NAFTA).

⁹ Officials of the U.S. Department of Commerce, U.S. International Trade Commission (USITC) staff telephone interview, Mar. 1994.

¹⁰ Taiwan formally applied for accession to the GATT in 1990. A working party was established in Sept. 1992 to consider Taiwan's membership.

¹¹ Officials of the U.S. Department of Commerce, USITC staff telephone interview, Mar. 1994.

¹² Ibid.

¹³ The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

¹⁴ Officials of the U.S. motor vehicle industry, USITC staff telephone interviews, Feb.-Mar. 1994; and *Report of the Industry Sector and Functional Advisory Committees (ISAC/IFAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

Likely Impact on U.S. Trade

The net effect of the URA is likely to be positive but small, as exports increase in response to foreign tariff reductions. According to the Commission's sectoral model, the URA likely would have a negligible impact on U.S. imports because U.S. tariff cuts average only 0.01 percentage point. Trade patterns are not likely to change as a result of the cut in U.S. tariffs.

The URA likely will have a modest (over 5 to 15 percent) positive impact on U.S. exports to GATT countries, although approximately one-half of all U.S. motor vehicle exports are to Canada, where most enter duty-free, mainly under the Automotive Products Trade Act of 1965 (APTA).

Likely Impact on U.S. Production, Employment, and Consumers

The Commission's sectoral model indicates that the likely increase in U.S. production and employment will be small and related only to increased exports. The URA are expected to have only a negligible positive impact on U.S. consumers, as price effects due to the URA likely will be insignificant.

U.S. Industry Positions on the URA

The U.S. motor vehicle industry position on the URA is generally neutral, although there is concern and disappointment with certain agreements.¹⁵ Most notably, strong disappointment was expressed with the failure to reduce the EU 22-percent heavy truck tariff. One leading U.S. producer of heavy trucks is convinced that the firm's sales in Europe would increase substantially if the EU tariff were reduced to

¹⁵ Ibid.

4 percent, the level of U.S. tariffs.¹⁶ Without substantial reduction of the EU tariff, U.S. heavy truck producers lacking EU assembly plants probably will have to invest in such production facilities in order to gain regional market share. **Because** European companies own much of the U.S. medium and heavy truck industry," EU tariff reductions are not favored by all U.S. producers. The European plants of U.S. heavy truck companies benefit from the high EU tariff. The EU tariff reduction is, however, considered to be very important to one of the largest U.S.-owned medium and heavy truck companies.¹⁷ For U.S.-owned producers attempting to strengthen their competitive position, access to the EU market, whether through U.S. exports or EU assembly plants, is important in the long term.

One U.S. company representative also noted concern that U.S. anti-dumping laws may be undermined by the URA, and this view is shared by at least one other U.S. motor vehicle producer.¹⁸ The representative noted that in the event that the URA significantly reduces the effectiveness of U.S. anti-dumping laws, the firm would actively oppose the URA. Specifically, some industry officials believe that the final text of the antidumping agreement has increased the burden on domestic industries seeking import relief from unfair trade practices, or possibly diminished their rights to do so. The U.S. industry has offered recommendations for providing a system that it believes would assure openness and fairness in deterring and disciplining dumping.²⁰

¹⁶ Representatives of the U.S. medium and heavy truck industry, USITC staff telephone interviews, Mar. 1994.

¹⁷ Most notably, Freightliner Corp., one of the two largest U.S. heavy truck producers, is a subsidiary of Daimler-Benz AG of Germany. AB Volvo of Sweden controls 76 percent of the Volvo GM Heavy Truck Corp. Mack Trucks Inc. is owned by Renault Vehicules Industriels, of France. These producers account for about 43 percent of the U.S. heavy and medium truck market.

¹⁸ Representatives of the U.S. automobile industry, USITC staff telephone interview, Mar. 1994.

¹⁹ Ibid.

²⁰ *ISAC/IFAC Report*, app. I, Jan. 1994.

CHAPTER 37

Motor-Vehicle Parts¹

Table 37-1
Motor-vehicle parts: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	510	525	519	1.8
Trade data (million dollars):				
Shipments	79,891	84,893	90,831	13.7
U.S. exports:				
Total	22,197	25,600	29,271	31.9
GATT ² signatories	21,574	24,916	28,541	32.3
Other	623	684	730	17.2
U.S. imports:				
Total	19,758	22,384	24,957	26.3
GATT signatories	19,227	21,731	24,177	25.7
Other	531	653	780	46.8
U.S. trade balance:				
Total	2,439	3,217	4,314	(³)
GATT signatories	2,347	3,186	4,364	(³)
Other	92	31	-50	(³)
Consumption	77,452	81,676	86,517	11.7
Import market share (percent):				
Total	25.5	27.4	28.8	(³)
GATT signatories	24.8	26.6	27.9	(³)
Other	0.7	0.8	0.9	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² *and U.S. Competitive Position*

The Uruguay Round Agreements (URA) are likely to have a positive but negligible effect (less than

¹ The following product groups are covered in the discussion of this industry sector: internal combustion piston engines; ball and roller bearings; automotive batteries; ignition, starting, lighting, and other electrical

¹—Continued

equipment; all of the parts covered under Harmonized Tariff Schedule (HTS) heading 8708; and other motors and engines for automotive use. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. I and app. E.

1 percent) on U.S. trade, production, employment, and consumers with respect to the motor-vehicle parts sector. Between 75 and 90 percent of the value of all sector trade is between the United States, Canada, and Mexico and is currently duty-free under the North American Free-Trade Agreement (NAFTA)³ or Automotive Products Trade Act (APTA). In addition to tariff reductions, agreements on intellectual property, rules of origin, and safeguards are expected to affect this sector.

In 1993, the U.S. industry was the third-largest global producer of motor-vehicle parts, with an estimated production of \$91 billion, behind Japan (about \$144 billion), and the European Union (EU) (approximately \$95 billion).⁴ The largest U.S. producers of motor-vehicle parts are subsidiaries of the U.S. Big Three automakers (General Motors, Ford, and Chrysler), accounting for an estimated 50 percent of the U.S. market in 1993 (11 percent of the global market).⁵ The top seven U.S. independent suppliers—Dana, Allied Signal, TRW, ITT Automotive, Rockwell Automotive, Borg Warner, and Eaton—accounted for about 18 percent of the U.S. market in 1993. The remaining 32 percent was accounted for by over 5,000 U.S. establishments, including some 300 Japanese-owned production facilities.

The U.S. motor-vehicle parts industry is mature and moderately concentrated, supplying two major market segments, the original equipment (OE) market and the aftermarket. OE parts producers prefer to locate near auto assembly facilities in order to minimize transportation costs and maximize responsiveness to automakers' just-in-time production and inventory schedules. Most OE firms are in Michigan, Ohio, Indiana, Illinois, and New York. Parts makers supplying the aftermarket have less incentive to locate near assembly sites, and they are scattered across the country. Most aftermarket establishments are located in California, Texas, and Florida.

The sector is improving its international competitive position, largely in response to several global developments: (1) competitive pressures exerted by Japanese-owned parts makers; (2) new innovative manufacturing and organizational systems introduced by Japanese automobile manufacturers (for example, Toyota) and, to a lesser degree, by at least one

³ Duties for trade with Canada and Mexico will be reduced under the North American Free-Trade Agreement (NAFTA). For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

⁴ Estimated by USITC staff from data supplied by the U.S. Department of Commerce, The Boston Consulting Group, Credit Suisse, and McKinsey Global Institute.

⁵ Estimated by USITC staff from data supplied by J.J. Chanaron, Organization for Economic Cooperation and Development (OECD), and the Trinet Market Share Report.

European auto assembler (Volvo); and (3) the opportunities afforded by NAFTA.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The current average calculated tariff rate for U.S. sector imports is 3.5 percent ad valorem (excluding Canada, Mexico, and the Virgin Islands). Mexico and Canada accounted for an estimated 73 percent of U.S. sector exports and 45 percent of U.S. sector imports in 1993.⁶ The United States has agreed to reduce its duties by an average of 1 percentage point under the URA.

Tariffs in other GATT markets varied significantly in 1993, ranging from 8.6 percent in Korea to 1.1 percent in Japan. The URA negotiations attempted to harmonize developed-country tariffs at 2 percent ad valorem. This goal was largely agreed to in Europe, but was accomplished to a lesser degree in certain Asian and Latin American countries. Japan agreed to bind its tariffs at zero, which was a negotiating objective of the Industry Sector Advisory Committee on Transportation, Construction, and Agricultural Equipment (ISAC 16).⁷

Several other significant trading partners also offered tariff reductions. Australia, Korea, Singapore, Venezuela, and Saudi Arabia currently have tariffs on sector products ranging up to 15 percent, but agreed to reduce tariffs to 2 percent. Mixed results were attained with respect to Turkey, Brazil, and Chile, where bound ceiling rates of 25 to 35 percent were agreed to but no significant reductions were forthcoming.

Other Provisions

Several URA provisions are likely to benefit sector industries. These include the Agreement on Trade Related Investment Measures (TRIMs),⁸ which is

⁶ An estimated 80 percent of Canadian imports of motor-vehicle parts from the United States are currently free of duty, largely as a result of the Automotive Products Trade Act of 1965 (APTA) and the U.S.-Canada Free Trade Agreement of 1989 (CFTA). The remaining duties are subject to phase-out over a 5-year period under the NAFTA.

⁷ *Report of the Industry Sector Advisory Committee on Transportation, Construction, and Agricultural Equipment for Trade and Policy Matters (ISAC 16) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 14, 1994.

⁸ Agreement on Trade-Related Investment Measures, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to minimize trade restriction and distortion by investment measures not previously covered by the GATT, such as local-content requirements, trade-balancing requirements, foreign exchange limitations, domestic sales requirements, and export performance requirements.

intended to progressively limit the ability of developing countries to manipulate trade through local content and minimum export requirements. Agreements on rules of origin⁹ and safeguards¹⁰ are also important because they likely will bring about greater consistency, transparency, and predictability in these areas.

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the impact of the URA on overall U.S. trade likely will be mitigated by existing U.S. trade patterns, which include high concentrations of U.S. trade in motor-vehicle parts with Canada and Mexico. Because an estimated 75 to 90 percent of trilateral trade (in value) is duty-free, the URA likely will have a negligible impact on U.S. imports and exports of motor-vehicle parts; U.S. net trade should be negligibly affected as a result. Although negligible, the net impact will be positive, because foreign tariff reductions under the URA likely will stimulate exports of select U.S. parts.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, the negligible positive net trade effect is likely to prompt a comparable positive effect on U.S. production and employment within the sector. Despite recent decentralization, the motor vehicle parts sector continues to be concentrated in the Midwest region of the United States, and any gains in U.S. employment are likely to be realized in this region. The URA likely will have a negligible positive effect on U.S. consumers as price reductions are likely to be negligible.

⁹ Agreement on Rules of Origin, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement sets forth a timetable under which GATT rules of origin will be developed and implemented. The agreement establishes a working committee to consult with the Customs Cooperation Council, a non-GATT entity, in developing GATT rules of origin. The agreement is intended to ensure that such rules are clear and are applied in an impartial, transparent, predictable, consistent, and neutral manner.

¹⁰ Agreement on Safeguards, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to clarify and reinforce the disciplines of GATT article XIX (Emergency Action on Imports of Particular Products), to re-establish multilateral control over safeguards and eliminate measures that escape such control, and to recognize the importance of structural adjustment by industries during the period that a safeguard measure is in effect.

U.S. Industry Positions on the URA

Since the inception of the Uruguay Round of multilateral trade negotiations in 1986, U.S. motor-vehicle parts industry representatives have considered market access as the key provision to be addressed within the framework of the URA. Accordingly, U.S. representatives of ISAC 16 continually pursued tariff reductions in the EU and in newly developed Asian and Southeast-Asian markets.¹¹ U.S. industry officials generally believe that URA tariff reductions will not have any significant effect on their operations. One independent leading parts manufacturer, however, stated that the advances made in the URA will have a small positive impact on its operations by creating a more open trade and investment environment.¹²

An official representing a large U.S. independent parts supplier noted that the URA will help expand the company's international operations by creating a more stable, orderly, predictable, and homogeneous environment in which to do business.¹³ This official cautioned, however, that initial enthusiasm is tempered by the recognition that as a first-tier supplier of components and subsystems (particularly airbags and seat belts), his company's operations are often close to those of its customers. Consequently, the subject company's export sales represent a relatively low percentage of its total automotive sales and hence, tariff reductions would, at best, have only a small impact on its production volume, labor force, and net earnings.¹⁴

U.S. industry representatives also pointed out certain nontariff provisions of the URA that will have a direct positive effect on the sector. Specific agreements mentioned include those on TRIMs, Trade-Related Aspects of Intellectual Property Rights (TRIPs), Rules of Origin, and to a lesser extent, Safeguards.¹⁵ The TRIPs agreement is viewed by some parts makers as particularly helpful in avoiding new provisions that might have required the United States to amend its current law on industrial designs. The objective of U.S. parts industry officials with respect to the agreement related to rules of origin was to ensure maximum consistency in the URA text with the value-content based preferential rules of origin in the NAFTA. This objective was largely achieved.¹⁶

¹¹ Officials of the motor-vehicle parts industry, USITC staff telephone interviews, Mar.-Apr. 1994, indicated their agreement with the ISAC 16 position.

¹² Dana Corp. (Toledo, OH), official submission to USITC, Mar. 11, 1994.

¹³ TRW, Inc. (Arlington, VA), official submission to USITC, Mar. 30, 1994.

¹⁴ Ibid.

¹⁵ Motor & Equipment Manufacturers Association (MEMA) (Washington, DC), official submission to USITC, Mar. 1994.

¹⁶ MEMA, official submission to USITC, Mar. 1994.

CHAPTER 38

Aerospace Equipment and Parts¹

Table 38-1
Aerospace equipment and parts: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	660	597	515	-22.0
Trade data (million dollars):				
Shipments	68,540	67,889	57,706	-15.8
U.S. exports:				
Total	42,749	44,005	38,939	-8.9
GATT ² signatories	39,215	38,769	33,136	-15.5
Other	3,534	5,236	5,804	64.2
U.S. imports:				
Total	12,886	13,447	11,990	-7.0
GATT signatories	12,847	13,402	11,894	-7.4
Other	39	45	96	146.2
U.S. trade balance:				
Total	29,863	30,558	26,950	(³)
GATT signatories	26,368	25,367	21,242	(³)
Other	3,495	5,190	5,708	(³)
Consumption	38,677	37,331	30,757	-20.5
Import market share (percent):				
Total	33.3	36.0	39.0	(³)
GATT signatories	33.2	35.9	38.7	(³)
Other	0.1	0.1	0.3	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will have a negligible positive effect (1 percent or less) on

¹ The following product groups are covered in the discussion of this industry sector: aircraft engines and gas turbines; and aircraft, spacecraft, and related equipment. The principal industry segments represented in this sector include those companies manufacturing civil and military aircraft and spacecraft, aircraft and spacecraft engines, and parts for this equipment. See app. F, vol. II, for trade tables for this sector and these groups.

net trade, production, employment, and consumers in the aerospace equipment and parts sector, as the majority of the trade in these products was duty-free prior to the Uruguay Round. In addition to tariff reduction, the agreement on subsidies is likely to have the greatest effect on this sector.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. I and app. E.

The United States has maintained over a 60-percent global market share for aerospace equipment and parts since the 1970s. In 1992, U.S. producers accounted for about 93 percent of the U.S. domestic airline fleet, and nearly 100 percent of the U.S. military market in this sector. There are two major Large Civil Aircraft (LCA) producers in the United States, and three foreign competitors. One of these, Airbus Industries, G.I.E. (Toulouse, France), is a major competitor; this consortium now holds nearly one-third of the world market for civilian aircraft.³ In 1992, about three-quarters of the world civilian airline fleet, excluding the former Soviet Union countries and the United States, were of U.S. manufacture.

During 1993, about 92 percent of total U.S. imports in this sector entered duty-free, largely under the Agreement on Trade in Civil Aircraft (ATCA), which provides for the duty-free trade of civil aircraft, aircraft engines, and most parts and equipment for these aircraft. In 1993, about 76 percent of total U.S. sector exports were for civilian customers.

Suppliers to the U.S. aerospace industry are nationwide. Major U.S. assemblers of aircraft are in Washington and California; of engines, in Ohio and Connecticut; and of spacecraft, in Florida and California.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated tariff rate for U.S. sector imports is 0.8 percent ad valorem; a reduction to 0.3 percent was offered under the URA. The major trading partners for this sector's goods (Canada, France, Japan, and the United Kingdom), however, are ATCA signatories; thus, the effective duty rate for civilian goods is zero. The United Kingdom, Japan, and France, also signatories of the ATCA, are the principal export markets for U.S.-manufactured sector goods. Such trade is predominantly duty-free.

Other Provisions

The URA on Subsidies and Countervailing Duties⁴ is likely to have the greatest effect on sector products.

³ Airbus Industrie is a consortium of European companies that do business as a French groupement d'intérêt économique (G.I.E.). Principal partners include Aerospatiale (France), British Aerospace (United Kingdom), Construcciones Aeronáuticas S.A. (Spain), and Deutsche Aerospace (Germany).

⁴ Agreement on Subsidies and Countervailing Measures, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement defines prohibited, actionable, and non-actionable subsidies; and sets forth rules for imposition of countervailing measures in accordance with

At present, direct government assistance to industrial research and precompetitive development may be actionable if it distorts world trade. If the URA are implemented in their present form, certain forms of assistance will no longer be actionable. U.S. manufacturers have not, in the past, relied on direct government subsidies for research and development (R&D) of commercial aerospace products. This change could benefit the commercial aerospace industry in the United States if the U.S. Government chooses to directly support R&D in this industry. Airbus, the major U.S. competitor, has benefitted from direct design and production supports since the late 1960s.

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the URA likely will have a negligible positive effect on net trade. Trade in sector products is predominantly duty-free under the ATCA and reductions in current rates are small. Imports are expected to increase by a negligible amount, while exports increase by a small (over 1 percent to 5 percent) amount. There should be no change in trade patterns due to the URA.

The codification of governmental subsidies could have a long-term impact on the level of U.S. imports. However, in terms of R&D expenditures, the level of governmental support that would be required by new-entrant foreign manufacturers to reach a level equivalent with the current U.S. aerospace infrastructure likely would be prohibitive. If direct government R&D support to commercially applicable aerospace technologies occurred, U.S. sector exports might increase somewhat.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, there will be a negligible positive effect on U.S. production, employment, and consumers due to the URA. Although production and employment may increase due to the small increase in sector exports, production and employment rates will be more directly affected by global economic recovery. Consumers of aerospace products also will not benefit directly due to the URA, as it is unlikely that these agreements will lower prices or increase the supply of aircraft.

⁴—Continued
article VI of the GATT 1994 with respect to goods benefiting from prohibited or actionable subsidies. This newly-concluded URA would permit nonactionable government subsidy for industrial research of up to 75 percent of the cost of "industrial research" and up to 50 percent of the costs of "precompetitive development activity" (applied research and development activities essentially through the creation of the first, noncommercial prototype).

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Aerospace Equipment for Trade Policy Matters (ISAC 1), and the Aerospace Industries Association of America, Inc., support the final URA.⁵ Negotiations are continuing on the Agreement on Trade in Civil Aircraft.⁶

⁵ *Report of the Industry Sector and Functional Advisory Committees (ISACIIFAC) on The Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994; and Raymond J. Waldmann on Behalf of Aerospace Industries Association of America, Inc., statement before the U.S. House, Committee on Ways and Means, Subcommittee on Trade, Feb. 22, 1994.

⁶ The 1979 General Agreement of Tariffs and Trade Aircraft Agreement (Agreement on Trade in Civil Aircraft) required the elimination of customs duties and

⁶—Continued

other charges (or administrative burdens in the processing) on civil aircraft or repairs thereon and parts. It also applied the provisions of the Agreement on Technical Barriers to Trade (Standards Code) to civil aircraft, required that purchasers of aircraft be free to select suppliers on the basis of commercial and technological factors, without any "unreasonable" government pressure, inducements, or sanctions; prohibited government application of quantitative restrictions on civil aircraft in a manner inconsistent with the GATT; and applied the full application of the Agreement on Subsidies and Countervailing Measures to, among other things, prohibit export subsidies or credits associated with aircraft. Current negotiations seek to revise the agreement by incorporating provisions contained in the 1992 bilateral agreement between the United States and the European Union (EU). For more information, see U.S. International Trade Commission (USITC), *Global Competitiveness of the U.S. Advanced-Technology Manufacturing Industries: Large Civil Aircraft* (investigation No. 332-332), USITC publication 2667, Aug. 1993.

CHAPTER 39

Certain Transportation Equipment'

Table 39-1
Certain transportation equipment: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	190	190	188	-1.1
Trade data (million dollars):				
Shipments	19,776	20,385	21,200	7.2
U.S. exports:				
Total	4,378	5,219	4,523	3.3
GATT ² signatories	3,858	4,255	3,722	-3.5
Other	520	963	801	54.0
U.S. imports:				
Total	2,719	3,078	4,090	50.4
GATT signatories	2,589	2,930	3,921	51.4
Other	129	148	169	31.4
U.S. trade balance:				
Total	1,659	2,141	433	(³)
GATT signatories	1,269	1,325	-200	(³)
Other	391	816	633	(³)
Consumption	18,117	18,244	20,767	14.6
Import market share (percent):				
Total	15.0	16.9	19.7	(³)
GATT signatories	14.3	16.1	18.9	(³)
Other	0.7	0.8	0.8	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis ² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will have a negligible positive effect (1 percent or less) on net trade for the transportation equipment sector because the majority of trade is already subject to very

I The following product groups are covered in the discussion of this industry sector: locomotives and rolling

¹—Continued

stock; motorcycles, mopeds, and parts; miscellaneous vehicles and transportation-related equipment; ships, tugs, pleasure boats, and similar vessels. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

low average duty rates or is duty-free.³ The URA likely will result in a negligible positive effect on U.S. production and employment, as any decreases in production and employment due to increased imports will be more than offset by production and employment increases due to increased exports. The impact of the URA on U.S. consumers of these products is likely to be positive but small (over 1 percent to 5 percent). In addition to tariff reductions, which should have the single greatest effect on this sector, subsidies and countervailing measures will also likely affect this sector.

The United States maintains approximately a 20-percent global and 80-percent U.S. market share in this sector. However, relative international and domestic competitiveness varies among the industries that make up this sector.⁴ Suppliers to this U.S. sector are not concentrated in specific U.S. geographical areas; therefore, there is unlikely to be any particular regional benefit from increased sales of transportation goods and parts sales.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated U.S. tariff for this sector, exclusive of trade with Canada and Mexico, is 2.5 percent ad valorem. Average tariffs should be reduced under the URA by 1.4 percentage points. The anticipated duty reductions of other major GATT partners average 2 percentage points.

Other Provisions

Prior to the URA, the subsidization of industrial research and development (R&D) may have been actionable under the existing GATT subsidies code. However, the Agreement on Subsidies and Countervailing Measures⁵ allows nonactionable

³ For example, large commercial vessels are not subject to the assessment of import duties, and there is only one small group of products in this sector (railroad passenger and freight cars) that has a high (18 percent) U.S. ad valorem duty rate (column 1). In addition, most U.S. trade in locomotives and rolling stock is with Canada; this trade will be duty-free under the North American Free-Trade Agreement (NAFTA).

⁴ For example, the U.S. shipbuilding industry has not been competitive internationally for several years. Conversely, U.S. recreational boat manufacturers have been consistently competitive internationally and build significant numbers of craft for export.

⁵ Agreement on Subsidies and Countervailing Measures, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement defines prohibited, actionable, and non-actionable subsidies; and sets forth rules for imposition of countervailing measures in accordance with

government subsidies for industrial research of up to 75 percent of the cost of "industrial research" and up to 50 percent of the costs of "precompetitive development activity." A limited number of individual sector products, such as tanks and certain small high-technology boats, which benefit from extensive industrial R&D may be affected by this agreement. Subsidy issues that affect the shipbuilding industry have been relegated to the Organization for Economic Cooperation and Development (OECD) and thus, will not be affected by the URA.

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the URA are likely to have a small effect on U.S. imports, and a negligible effect on the U.S. market share of imports from GATT and non-GATT signatories. About 40 percent of U.S. imports are from Canada and Mexico and already benefit from duty-free access to U.S. markets under the North American Free-Trade Agreement (NAFTA). Japan and Italy are other important import sources accounting for 29 and 12 percent, respectively, of U.S. sector imports in 1993.

The Commission's sectoral model projects a modest increase (over 5 to 15 percent) in U.S. sector exports because of the URA. However, Canada is the principal export market for U.S.-manufactured sector goods (nearly 30 percent of U.S. exports to GATT countries in 1993) and such trade is predominantly duty-free; therefore, the actual increase in exports to GATT markets is likely to be small or negligible. The agreement on subsidies and other URA provisions are likely to have a negligible impact on both U.S. imports and exports in this sector.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, the URA likely will result in a negligible positive effect on U.S. production and employment. Decreases in production and employment due to increased imports likely will be offset by increases due to increased exports. Although U.S. production and employment likely will increase somewhat due to the reduction of sector tariffs, production and employment rates will be more directly affected by global economic conditions.

The impact of the URA on U.S. consumers of these products likely will be positive but small, due to a negligible decrease in the price of U.S. products and a small fall in the prices of imports. Increased imports may also increase the variety of available products, contributing to the small gain by U.S. consumers.

⁵—Continued
article VI of the GATT 1994 with respect to goods benefiting from prohibited or actionable subsidies.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Transportation, Construction, and Agricultural Equipment for Trade Policy Matters (ISAC 16), has given the URA mixed reviews. ISAC 16 represents a number of discrete industrial sectors, each of whose worldwide markets have their own particular characteristics. Therefore, the committee states that the impact of the URA will differ from industry to industry.⁶

⁶ *Report of the Industry Sector Advisory Committee on Transportation, Construction, and Agricultural Equipment (ISAC 16) on the Uruguay Round of Multilateral Negotiations*, Jan. 1994; and industry and

Positive remarks noted improvements in the provisions on standards, customs valuation, rules of origin, import licensing, preshipment inspection, government procurement, and trade-related aspects of intellectual property rights. Concern was expressed regarding the possible weakening of current laws on unfair trade practices, and the removal of certain subsidies from international discipline under the subsidies provisions. Based on this outcome, ISAC 16 neither supports nor opposes the URA. Other industry sources did not indicate concern over the possible effect of the URA on U.S. industries in this sector.⁷

⁶—*Continued*
association representatives, U.S. International Trade Commission (USITC) staff telephone interviews, Mar. 1994.

⁷ *Ibid.*

CHAPTER 40

Metal and Wood Working Equipment¹⁾

Table 40-1
Metal and wood working equipment: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	111	116	122	10.3
Trade data (million dollars):				
Shipments	12,724	13,360	14,028	10.3
U.S. exports:				
Total	3,340	3,753	4,065	21.7
GATT ² signatories	3,009	3,358	3,496	16.2
Other	332	394	569	71.7
U.S. imports:				
Total	4,659	4,444	5,079	9.0
GATT signatories	4,253	3,966	4,498	5.8
Other	406	477	581	43.2
U.S. trade balance:				
Total	-1,319	-691	-1,014	(³)
GATT signatories	-1,245	-608	-1,002	(³)
Other	-73	-83	-12	(³)
Consumption	14,043	14,051	15,042	7.1
Import market share (percent):				
Total	33.2	31.6	33.8	(³)
GATT signatories	30.3	28.2	29.9	(³)
Other	2.9	3.4	3.9	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² *and U.S. Competitive Position*

As a result of the Uruguay Round Agreements (URA), the U.S. metal and wood working equipment

¹ The following product groups are covered in the discussion of this industry sector: metal-rolling mills and parts thereof; machine tools for cutting metal and parts, tool holders, work holders, dividing heads and other special attachments for machine tools; machine tools for metal forming and parts thereof; non-metalworking machine tools and parts thereof; portable electric handtools; nonelectrically powered hand tools and parts thereof; and electric and gas welding and soldering

sector can expect small gains (over 1 percent to 5 percent) in net trade, production, and employment, and U.S. consumers can expect negligible gains (1 percent or less) in terms of reduced prices and increased

¹—Continued

equipment. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. I and app. E.

product availability. These effects are due principally to the small size of U.S. and foreign tariff reductions and because of the high volume of duty-free trade under the North American Free-Trade Agreement (NAFTA). Tariff reductions are the single most important URA provision agreement for this sector.

U.S. metal and wood working equipment generally embodies a high level of technological sophistication while being price competitive. However, for much of this equipment, European-built products incorporate the world's leading technology.

The U.S. metal and wood working equipment industry accounted for an estimated 12 percent of world production of these products, 18 percent of world trade, and 66 percent of the U.S. market. The U.S. industry is concentrated in the Midwest.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated tariff rate for U.S. imports of metal and wood working equipment was 3.7 percent ad valorem in 1993, ranging from free to 9.7 percent ad valorem. The average calculated U.S. tariff rate on metal and wood working equipment products under the URA is to be reduced 0.8 percentage point (22 percent), to 2.9 percent ad valorem. There are to be virtually no tariff reductions on U.S. imports of metal-cutting and metal-forming machine tools and parts thereof, and related accessories. The largest U.S. tariff reductions are to be on metal-rolling mills (complete tariff elimination), powered hand tools, and welding and soldering equipment.

Mexico and Canada together accounted for 27 percent of U.S. exports in 1993, but only 7 percent of U.S. imports.³ An additional 14 percent of U.S. exports go to non-GATT countries. The European Union (EU) accounted for 21 percent of U.S. exports in 1993, with tariff rates ranging from free to 20 percent ad valorem; the average calculated tariff rate was 4.2 percent ad valorem. EU tariffs under the URA are to be reduced by 1.6 percentage points (39 percent), to 2.6 percent ad valorem. Tariff rates are relatively low in traditional industrialized markets for this equipment. Those GATT signatories with the largest tariff reductions in this sector tend to have historically small markets for metal and wood working equipment, and therefore lack the market to support local production.

³ Duties for trade with Canada and Mexico will be eliminated under the North American Free-Trade Agreement (NAFTA). For information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

Other Provisions

No other URA provisions are expected to have a significant effect on this sector.

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the URA likely will result in a small improvement in the U.S. trade deficit. The U.S. Midwest will likely be the region of the United States most affected by any changes in U.S. trade in this sector resulting from the URA. The URA are likely to result in small increases in U.S. imports of metal and wood working equipment because of the minor tariff reduction. Shifts in U.S. suppliers are not expected.

The URA are expected to result in small increases in U.S. exports of metal and wood working equipment. Tariff reductions in GATT markets other than Canada and Mexico are not expected to result in significantly increased U.S. exports, because current tariff rates are low and reductions under the URA are relatively small. Exports to China are likely to increase despite China's non-GATT status and consequent lack of tariff reductions under the GATT.⁴ China is becoming a significant export market for U.S. metal and wood working equipment products because of strong demand for industrial products. China accounted for 7 percent of U.S. exports in 1993, rising from 3 percent in 1991.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, net gains in production and employment by the U.S. metal and wood working equipment industry are likely to be small as a result of the URA. The U.S. Midwest, where most U.S. producers and consumers are located, will benefit the most by net gains in production and employment in this sector. Small increases in U.S. imports are not expected to result in decreases in U.S. production or employment in this sector, as any decrease would be offset by increases due to increased exports. Those GATT signatories that agreed to the largest tariff reductions in this sector tend to lack a large enough market to support local production. In addition, there is overcapacity in the global metal and wood working equipment sector, especially in Europe and Japan. In the long term, both U.S. and foreign producers of this equipment may establish production facilities in China and Latin America, which are expected to be growing markets for this equipment.

⁴ The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

The effect of the URA on U.S. consumers of these products is likely to be positive but negligible, because the small average reduction in U.S. tariff rates is expected to be absorbed by U.S. importers of metal and wood working equipment and not passed on to U.S. consumers in the form of price reductions.

U.S. Industry Positions on the URA

The U.S. industries included in this sector are principally represented by the Industry Sector Advisory Committee on Capital Goods for Trade Policy Matters (ISAC 2), and to a lesser extent, by ISAC 4 on Consumer Goods.⁵ Generally, the industries included in this sector support the URA as concluded and believe the effects of the URA on their industries will be small.⁶

AMT, formally known as "AMT—The Association for Manufacturing Technology," which represents the U.S. metalworking machine tool industry, generally supports the URA as concluded and generally believes the effects of the URA will be small on the U.S.

⁵ The Industry Sector Advisory Committee on Capital Goods for Trade Policy Matters (ISAC 2) represents the metal-rolling mills, metalworking and non-metalworking machine tool industries, welding equipment, and portions of the powered hand tools industry. ISAC 4 represents the remaining portions of the powered hand tools industry.

⁶ *Report of the Industry Sector and Functional Advisory Committees (ISAC/IFAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

industry and economy.? However, AMT has reservations about certain aspects of the URA.

AMT believes that the Office of the United States Trade Representative (USTR) will lack the legal resources to effectively pursue U.S. interest in pursue U.S. interest in GATT dispute-settlement proceedings. AMT also believes that the U.S. implementing legislation for the URA should ensure that the United States be able to use its trade laws, particularly section 301 of the U.S. Trade Act of 1974, to open unfairly closed markets to U.S. exports.⁸ In order to promote such changes to the implementing legislation, AMT has joined the efforts of the Labor Industry Coalition for International Trade (LICIT) and its subsidiary, the Coalition for Open Trade (COT), to expand the scope of section 301 to more forcefully address foreign anticompetitive practices.⁹

AMT is also concerned that because of the document classification system used by the GATT, USTR will be prohibited from transmitting GATT dispute-settlement proceedings to the U.S. private sector. If this interpretation is correct, AMT believes that USTR will lack the resources to effectively pursue U.S. interests.

The Wood Machinery Manufacturers' Association (WMMA) does not oppose the URA as concluded, but also does not have an opinion as to the effects of the URA on its member companies.¹⁰

⁷ Official of The Association for Manufacturing Technology (AMT), USITC staff telephone interview, Apr. 19, 1994.

⁸ AMT (McLean, VA), official submission to USITC, May 16, 1994.

⁹ AMT is concerned about foreign private anticompetitive practices that limit both U.S. exports and domestic sales of U.S. machine tool builders.

¹⁰ Official of Wood Machinery Manufacturers' Association, USITC staff telephone interview, Apr. 18, 1994.

CHAPTER 41

Industrial Machinery¹

Table 41-1
Industrial machinery: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	534	525	527	-1.3
Trade data (million dollars):				
Shipments	60,318	58,943	61,518	2.0
U.S. exports:				
Total	19,866	20,131	20,665	4.0
GATT ² signatories	17,261	17,332	17,372	0.6
Other	2,604	2,798	3,292	26.4
U.S. imports:				
Total	11,954	12,869	14,533	21.6
GATT signatories	11,307	12,104	13,786	21.9
Other	647	765	747	15.5
U.S. trade balance:				
Total	7,912	7,262	6,132	(³)
GATT signatories	5,954	5,229	3,586	(³)
Other	1,958	2,033	2,546	(³)
Consumption	52,406	51,681	55,386	5.7
Import market share (percent):				
Total	22.8	24.9	26.2	(³)
GATT signatories	21.6	23.4	24.9	(³)
Other	1.2	1.5	1.3	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariff and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The effect of the Uruguay Round Agreements (URA) on U.S. net trade, production, employment, and

The following product groups are covered in the discussion of this industry sector: farm and garden machinery; wrapping, packaging, and can sealing equipment; construction, mining, and mineral processing machinery; textile machinery; pulp, paper, and paperboard machinery; printing, typesetting, and bookbinding equipment; industrial food-processing machinery; centrifuges and filtering, purifying, and air conditioning

consumers in the industrial machinery sector is expected to be negligible (1 percent or less) but positive as tariffs on many products were reduced

¹—Continued

equipment; and forklift trucks. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

under zero-for-zero agreements and trade barriers were liberalized. In addition to tariff reductions, agreements on preshipment inspection, government procurement, trade-related investment measures (TRIMs), and import licensing likely will impact this sector.

The U.S. industrial machinery sector is dominated by the construction, agricultural, and air-conditioning and refrigeration equipment industries. These industries represent approximately 70 percent of total U.S. sector shipments and 68 percent of U.S. exports of industrial machinery. The United States is believed to be the world's largest single market for industrial machinery and the leading producer. In 1993, domestic production satisfied approximately 74 percent of total U.S. consumption of these products.

The industrial machinery market is global in nature. Intense competition among the principal manufacturing countries—the United States, Japan, and the European Union (EU)—has led to increased international cooperation. In recent years, the drive to expand market share overseas has prompted many of these industries to become more reliant on joint ventures, overseas subsidiaries, and technical exchange agreements. Moreover, major global manufacturers have established dealer and/or manufacturing subsidiaries in each major market to support their export efforts.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

Current U.S. tariff rates for industrial machinery range from free to 4.6 percent ad valorem. Under the URA, the United States has agreed to eliminate most U.S. tariffs on wrapping, packaging, and can-sealing machinery; forklift trucks; farm and garden equipment; pulp, paper, and paperboard machinery; and construction, mining, and mineral processing equipment.³ The negotiated average trade-weighted duty rates for the remaining sector products is to be reduced to less than 1.8 percent ad valorem. However, tariffs for some textile machinery are to remain high; previously ranging from 3.5 to 12 percent ad valorem, the United States offered to reduce duties for these products to 1.7 to 9.7 percent ad valorem.

During 1993, trade with GATT signatories accounted for approximately 84 percent of U.S. exports and 95 percent of U.S. imports. Canada, Mexico, Japan, and the EU are the leading U.S. export markets and the leading sources of U.S. imports. Together, Canada and Mexico accounted for 14 percent of total U.S. imports and 29 percent of total U.S. exports of

³ Japan, Canada, the European Union (EU) and the United States have agreed to eliminate duties for construction and agricultural equipment under a zero for zero agreement.

sector products in 1993; trade between these countries and the United States will be duty-free under the North American Free-Trade Agreement (NAFTA).

U.S. exporters are expected to continue to face high tariffs in major developing countries, ranging from 25 to 115 percent, even after conclusion of the URA. Foreign tariffs for air-conditioning and refrigeration equipment continue to be significant in developing nations, such as Thailand (30 percent), Australia (10 to 45 percent), India (25 to 115 percent), Korea (13 to 35 percent), Indonesia (40 percent), Brazil (25 percent), and Chile (32 percent). Such high foreign tariffs tend to minimize competition from U.S. manufacturers.

Other Provisions

Other URA provisions likely to benefit this sector due to increased transparency and harmonization of procedures, include those related to preshipment inspection,⁴ local-content requirements⁵ and TRIMs,⁶ government procurement practices,⁶ and import licensing.⁷ All of these have been common problems faced by U.S. exporters of industrial machinery.

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the URA likely will result in a small increase in both U.S. imports and exports of industrial machinery. As a result, the overall effect on the trade balance is likely to be positive but negligible. However, certain nontariff barriers (NTBs) to U.S. exports remain, particularly

⁴ Agreement on Preshipment Inspection (PSI), Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The Agreement seeks to ensure that PSI activities are carried out in an objective, uniform, and non-discriminatory manner that does not create trade barriers.

⁵ Agreement on Trade-Related Investment Measures, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to minimize trade restriction and distortion by investment measures not previously covered by the GATT, such as local-content requirements, trade-balancing requirements, foreign exchange limitations, domestic sales requirements, and export performance requirements.

⁶ Agreement on Government Procurement, Annex 4B, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. A revised text is expected to enter into force January 1, 1996. The revised text seeks to increase transparency in the laws, regulations, procedures, and practices relating to government procurement and seeks to ensure that they are not used as barriers to trade. Negotiations to expand coverage to subcentral governments and government-owned utilities will continue with the EU, Japan, and Canada.

⁷ Agreement on Import Licensing Procedures (ILP), Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The Agreement seeks to ensure, *inter alia*, that import licensing procedures are transparent and applied in a fair and equitable manner, and are not utilized in a manner contrary to the principles and obligations of the GATT 1994.

Japan's High Pressure Gas Control Law that regulates the manufacture, storage, movement, and handling of high pressure gases (including some refrigerants used in air-conditioning and refrigeration equipment).⁸

U.S. exports of textile machinery may continue to be particularly affected by market-access problems after the conclusion of the URA. Latin American and Asian countries have some of the world's most competitive apparel industries, making them some of the best potential markets for U.S. exports of textile machinery. However, U.S. equipment has been subject to rigorous preshipment inspection and high tariff rates in many of these markets.

Likely Impact on U.S. Production, Employment, and Consumers

The negligible positive change in U.S. trade as a result of the URA is expected to result in a similar positive impact on overall U.S. production and employment. Gains are expected to accrue principally to U.S. firms supplying machinery to the Far East market.

The impact of the URA on U.S. consumers of industrial machinery is likely to be small, due to a negligible decrease in the price of U.S. products and imports. In addition, the slight increase in U.S. imports may contribute to a broader assortment of industrial machinery in the U.S. market, contributing to the small gain by U.S. consumers.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Transportation, Construction and Agricultural Equipment for Trade Policy Matters (ISAC 16), and the Industry Sector Advisory Committee on Capital

⁸ Rene Hancher, Manager of International Trade, Air Conditioning & Refrigeration Institute (Washington, DC), official submission to U.S. International Trade Commission (USITC), Feb. 24, 1994.

Goods for Trade Policy Matters (ISAC 2), on balance support the final URA.⁹ However, members of ISAC 16 expressed their disappointment with some provisions of the URA that they felt may weaken the current laws on unfair trade practices.¹⁰

The American Textile Machinery Association, which represents U.S. manufacturers of textile machinery, ancillary machinery, and parts, expressed disappointment with the results of the URA. The Association believes that U.S. negotiators offered sharp reductions in U.S. duties on textile machinery without having secured reciprocal concessions from U.S. trading partners. The Association indicated that the URA, as currently framed, seriously threatens the future of the U.S. textile machinery industry.¹¹

Officials of Steel Heddle Manufacturing Co. stated that U.S. producers of textile machinery could expect an improvement in their U.S. production, employment, and exports if the foreign tariff rate cuts and other NTB reductions proposed in the URA are implemented. Officials of Steel Heddle opposed the proposed reduction in U.S. tariff rates under the URA, indicating that the U.S. market for textile machinery is already very open and reducing tariff rates further would only increase the level of imports and negatively affect U.S. production and employment.¹²

The Air Conditioning and Refrigeration Institute (ACRI) supports the tariff reductions offered under the URA and believes that exports will increase as a result. In addition, ACRI noted that an improved standards agreement under the URA likely will benefit the industry.¹

⁹ *Report of the Industry Sector and Functional Advisory Committees (ISACIFAC) on the Uruguay Multilateral Trade Negotiations*, Jan. 1994.

¹⁰ *Ibid.*, pp. 2-3.

¹¹ Michael Kershow, Council to the American Textile Machinery Association, Collier, Shannon, Rill & Scott (Washington, DC), official submission to USITC, Mar. 11, 1994.

¹² David Cross, Steel Heddle Manufacturing Co. (Greenville, SC), official submission to USITC, Mar. 7, 1994.

¹³ Renee S. Hancher, Director of International Trade, The Air Conditioning and Refrigeration Institute (Alexandria, VA), official submission to USITC, May 2, 1994.

CHAPTER 42

Electrical Equipment and Components ¹⁾

Table 42-1
Electrical equipment and components: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	271	263	267	-1.4
Trade data (million dollars):				
Shipments	33,730	33,650	34,545	2.4
U.S. exports:				
Total	7,167	8,044	9,182	28.1
GATT ² signatories	6,515	7,308	8,247	26.6
Other	652	735	936	43.6
U.S. imports:				
Total	7,909	9,054	10,274	29.9
GATT signatories	7,134	8,072	9,045	26.8
Other	775	982	1,229	58.6
U.S. trade balance:				
Total	-742	-1,010	-1,092	(↔)
GATT signatories	-619	-763	-798	
Other	-123	-247	-293	
Consumption	34,472	34,660	35,637	3.4
Import market share (percent):				
Total	22.9	26.1	28.8	(↔)
GATT signatories	20.7	23.3	25.4	
Other	2.2	2.8	3.4	

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariff and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis ² and U.S. Competitive Position

The Uruguay Round Agreements (URA) are likely to have a modest positive effect (over 5 percent to 15

percent) on net trade in the electrical equipment and components sector. Proposed foreign tariff reductions and liberalized market access are likely to increase U.S. exports by a modest amount, while increases in imports will probably be small (over 1 percent to 5 percent). The URA are likely to have a small impact on

¹ The following product groups are covered in the discussion of this industry sector: boilers, turbines, and related equipment; electric motors, generators, and related equipment; electrical transformers, static converters, and inductors; flashlights and other portable electric lamps and light bulbs; and insulated electrical wire and cable and electrical conduit. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

U.S. production and employment and a negligible impact on consumers. In addition to tariff reductions, agreements on customs valuation, government procurement, and preshipment inspection could significantly affect this sector.

The U.S. electrical equipment and components sector is, for the most part, highly competitive; U.S. sector shipments are estimated to account for approximately 20 to 25 percent of the world total. Although the share of the domestic market accounted for by U.S. sector suppliers declined between 1991-93 from approximately 77 to 71 percent, a substantial portion of this decline was attributable to increased U.S. imports from Canada and Mexico. These imports largely represent border-assembly operations of U.S. companies in support of their domestic production efforts.

Although most sector products are mature, price is the major competitive factor in only certain high-volume "commodity" product lines, such as fractional horsepower motors for consumer applications, household light bulbs, and building wire and cable. In general, products within this sector are highly differentiated from one another with respect to their energy efficiency, quality of manufacture, level of customer support, and brand loyalty. U.S. companies, by virtue of their proximity to and knowledge of the U.S. market, also derive a significant competitive advantage in terms of their ability to respond quickly to the demands of the market, anticipate changing consumer preferences, provide service after the sale, and handle consumer complaints and problems.

Products covered by this sector are produced throughout the United States. Nevertheless, because the consumption of electrical energy is a major determinant of demand for most of these products, concentrations of production do exist in the East, North Central, Middle and South Atlantic, and Pacific Coast regions of the United States.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The current average calculated tariff rate for U.S. sector imports is 4.2 percent ad valorem. Within the sector, the average calculated tariff is highest for the product group including boilers, gas and steam turbines, and related equipment (7 percent ad valorem), and lowest for electrical transformers, static converters, and inductors (3.1 percent ad valorem). Under the URA, the average tariff rate for total U.S. sector imports is to be reduced to 3.0 percent ad valorem, a reduction of approximately 30 percent.

Aside from Mexico and Canada, which accounted for a combined 48-percent share of U.S. sector exports

in 1993,³ the other notable GATT-country markets for U.S. products are Korea and Japan (accounting for approximately 7 percent of 1993 U.S. exports of sector products), and the European Union (EU) with 11 percent of U.S. exports in 1993. The trade-weighted average tariff cut projected for shipments into Korea of products classified in chapter 84 (which covers boilers, turbines, and related equipment) of the Harmonized Tariff Schedule (HTS) is 4.6 percentage points and the comparable reduction in chapter 85 (which covers the remainder of sector products) is approximately 2.3 percentage points. The anticipated trade-weighted average tariff cuts for chapter 84 and 85 products exported to Japan are 4.0 and 2.4 percentage points, respectively. For the EU, the trade-weighted average ad valorem duty reductions for chapter 84 and 85 products are approximately 2.8 and 4.2 percentage points, respectively.

Other Provisions

The principal URA provisions that affect market access for sector products are customs valuation,⁴ government procurement,⁵ and preshipment inspection.⁶ The substantial change in the government procurement agreement, permitting U.S. suppliers to compete on an equal footing with foreign firms in the EU and Japan, could result in a significant increase in U.S. export shipments, particularly of electrical generating and transmission equipment. However, nothing in the current agreement provides a clear indication as to how effective such changes would be in practice. In any event, the benefit to the sector as a whole likely will be small.

³ Duties for trade with Canada and Mexico will be eliminated under the North American Free-Trade Agreement (NAFTA). For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

⁴ Agreement on Implementation of Article VII of the General Agreement on Tariffs and Trade 1994, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide greater uniformity and certainty in the implementation of rules relating to customs valuation set forth in article VII of the GATT 1994 by, *inter alia*, defining acceptable and prohibited valuation practices, increasing access to information by customs administrations, and providing for dispute settlement.

⁵ Agreement on Government Procurement, Annex 4B, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. A revised text is expected to enter into force January 1, 1996. The revised text seeks to increase transparency in the laws, regulations, procedures, and practices relating to government procurement and seeks to ensure that they are not used as barriers to trade. Negotiations to expand coverage to subcentral governments and government-owned utilities will continue with the EU, Japan, and Canada.

⁶ Agreement on Preshipment Inspection (PSI), Final Act Embodying the Results of the Uruguay Round of

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the URA likely will result in a modest net increase in U.S. exports, thereby improving the sector's trade deficit in electrical equipment and components. This is because the average trade-weighted reduction in U.S. import duties is less than that of most U.S. trading partners. However, in those larger markets in which the tariffs on U.S. exports are likely to decline (notably Korea, Japan, and the EU), the effects of proposed tariff cuts may be somewhat over-shadowed by nontariff considerations, such as shipping costs or internal market barriers. In addition, many U.S. suppliers have established production ties in these markets in order to compete.

There is expected to be a small increase in U.S. imports due to the URA. Almost 50 percent of the current value of sector imports is from Canada and Mexico and is subject to tariff elimination under the North American Free-Trade Agreement (NAFTA).

Likely Impact on U.S. Production, Employment, and Consumers

U.S. production and employment in the electrical equipment and components sector is expected to increase by a small degree as a result of the URA. No regional impact is anticipated as a result of the URA. With respect to consumers, there may be a small decline in prices as a result of U.S. tariff reductions. Because these reductions would only be expected to affect 50 percent or less of U.S. imports, U.S. consumers would be expected to derive negligible price benefits as a result of the URA.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Capital Goods for Trade Policy Matters (ISAC 2) has tentatively endorsed the URA, with some

⁶—Continued

Multilateral Trade Negotiations. The Agreement seeks to ensure that PSI activities are carried out in an objective, uniform, and non-discriminatory manner that does not create trade barriers.

reservations.? ISAC 2 members are most concerned that the URA permit more open, equitable, and reciprocal market access coupled with the reduction or elimination of barriers and trade-distorting practices.

With respect to customs valuation, ISAC 2 members have publicly applauded newly proposed GATT rules that improve the definition of the "transaction value" of goods. The Committee anticipates that the new rules, by clarifying customs value, should ameliorate customs disputes for ISAC 2 members.

Regarding rules of origin, ISAC 2 members concur with the current wording of the URA, noting that Congress should consider strengthening its instructions regarding how the country of origin is determined. ISAC 2 has recommended that the U.S. policy of "last substantial transformation" be adopted and that a change in tariff classification at the first four-digit level of the HTS be presumed to constitute such substantial transformation. In addition, the Committee recommended that parts for an assembled product be considered the same as the assembled product for purposes of assessing substantial transformation.

U.S. producers of electrical utility generation and transmission equipment support the agreement on government procurement. The National Electrical Manufacturers Association (NEMA) indicates that the agreement, which expands upon a bilateral Memorandum of Understanding on Procurement that was signed in May 1993, will expand trade opportunities in Europe for U.S. companies and allow equal competition in that market for the first time ⁸

The language embodied in the preshipment inspection agreement has been endorsed by ISAC 2 members, who believe that the proposed new procedures should reduce "unwarranted harassment" of U.S. shippers.⁹ Provisions in this agreement appear to ISAC members to apply without discrimination to all parties, thus providing for functional equity and reciprocity in implementation.

⁷ Report of the Industry Sector Advisory Committee on Capital Goods for Trade Policy Matters (ISAC 2) on the Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, Jan. 10, 1994, p. 3.

⁸ The European market for electrical power generation, transmission, distribution, and control equipment is estimated at approximately \$20 billion. NEMA, News Release, Apr. 17, 1994.

⁹ ISAC 2 Report, Jan. 10, 1994, p. 4.

CHAPTER 43

Appliances¹

Table 43-1
Appliances: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	139	139	139	0.0
Trade data (million dollars):				
Shipments	23,683	24,345	27,332	15.4
U.S. exports:				
Total	3,479	3,939	4,255	22.3
GATT ² signatories	3,038	3,490	3,774	24.2
Other	441	450	481	9.2
U.S. imports:				
Total	3,796	4,420	4,696	23.7
GATT signatories	2,853	3,332	3,611	26.6
Other	943	1,088	1,085	15.1
U.S. trade balance:				
Total	-317	-481	-441	(³)
GATT signatories	185	157	163	(³)
Other	-502	-638	-604	(³)
Consumption	24,000	24,826	27,773	15.7
Import market share (percent):				
Total	15.8	17.8	16.9	(³)
GATT signatories	11.9	13.4	13.0	(³)
Other	3.9	4.4	3.9	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariff and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) are likely to have a positive but negligible effect (1 percent or

¹ The following product groups are covered in the discussion of this industry sector: electric household appliances, commercial appliances, and scales. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to

less) on the trade balance for appliances, and on production and employment in this sector. Although tariff reductions are the most important URA provision for this sector, current tariff rates for most sector products are relatively low. In addition, a large proportion of U.S. trade in these products is with Canada and Mexico and, consequently, will have tariffs eliminated under provisions of the North American Free-Trade Agreement (NAFTA).

²—Continued

reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

The U.S. appliance industry is mature and highly concentrated, with five companies (General Electric, Whirlpool, White Consolidated/AB Electrolux, Maytag, and Raytheon) accounting for over 95 percent of domestic production of major appliances and an 80-percent share of the domestic market. The global appliance industry is dominated by producers in industrialized nations. Canada, Germany, Japan, Sweden, and the United States represent most of the world's leading manufacturers. High transportation costs and familiarity with consumer design and style preferences generally give manufacturers of appliances a significant competitive advantage in their home markets.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated U.S. tariff rate for sector products ranges from 3.5 to 4.6 percent ad valorem. Under the URA, the United States offered to reduce its average tariff rate by 1.9 percentage points, a reduction of 55 percent. The major trading partners for this sector are Canada, Mexico, Japan, and China. The tariff rates for U.S. exports to these countries currently range between zero and 18 percent ad valorem. Japan has agreed to reduce its average tariff by 2.4 percentage points. China is not a member of the GATT.³

Other Provisions

No other provisions of the URA are expected to have a significant effect on this sector.

³ The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the effect of the URA on the U.S. trade balance likely will be positive but negligible. The URA are likely to result in a small increase in the value of both U.S. imports and exports of appliances. However, trade with Canada and Mexico together accounts for 20 and 39 percent of U.S. imports and exports, respectively, and is already subject to duty elimination under the NAFTA.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, the URA are likely to have a negligible positive effect on production and employment, as decreases in production and employment due to increased imports will be offset by increases due to increased exports. The impact of the URA on U.S. consumers of these products is likely to be small, due to a negligible decrease in the price of U.S. products and a small decline in the price of imports.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Consumer Goods (ISAC 4) endorses the positive progress embodied in the URA and believes the final market access provisions are consistent with the sector's objectives in the Uruguay Round.⁴ Industry officials believe that the URA will be in the best interest of the United States and the industry.⁵

⁴ *Report of the Industry Sector and Functional Advisory Committee (ISAC/IFAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

⁵ U.S. International Trade Commission (USITC) staff telephone interviews with officials from the household and commercial appliances industries (Apr. 1994) indicated their agreement with the ISAC position.

CHAPTER 44

Miscellaneous Equipment¹

Table 44-1
Miscellaneous equipment: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	456	442	449	-1.5
Trade data (million dollars):				
Shipments	50,908	50,063	54,068	6.2
U.S. exports:				
Total	11,259	12,196	12,446	16.8
GATT ² signatories	10,219	10,754	11,816	15.6
Other	1,310	1,443	1,650	25.9
U.S. imports:				
Total	9,907	10,371	11,679	17.9
GATT signatories	9,431	9,795	11,095	17.6
Other	476	576	584	22.8
U.S. trade balance:				
Total	1,622	1,826	1,787	(³)
GATT signatories	788	959	722	(³)
Other	834	867	1,065	(³)
Consumption	49,286	48,237	52,281	6.1
Import market share (percent):				
Total	20.1	21.5	22.3	(³)
GATT signatories	19.1	20.3	21.2	(³)
Other	1.0	1.2	1.1	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariff and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) are expected to have a small positive effect (over 1 percent

¹ The following product groups are covered in the discussion of this industry sector: machinery for molding plastic and rubber; industrial robots and certain semiconductor manufacturing equipment; certain industrial thermal-processing apparatus; valves; pumps for liquids; and gear boxes and other machines and mechanical appliances, not elsewhere specified or included. See app. F, vol. II, for trade tables for this sector and these groups.

to 5 percent) on trade in the miscellaneous equipment sector and a negligible but positive effect (1 percent or less) on associated U.S. employment, production, and consumers. These results will be due to both tariff reductions and liberalization of certain market access

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

impediments, particularly under the agreement on government procurement.

The U.S. miscellaneous equipment sector accounts for approximately a 42-percent share of the global market for these products, and is noted worldwide for its high quality. Domestic producers accounted for an estimated 78-percent share of the U.S. market in 1993. Producers in the industrialized nations, including the European Union (EU), Japan, and Canada, are the world's principal producers of these products.

The business entities represented in this sector are a heterogeneous group, differing widely in size and market. The majority of the product categories covered by this sector are small, capital-intensive, slower growth, mature industries. The primary competitive factors for producers in this sector are price and the ability to meet advanced technology requirements in select market niche areas. Additional competitive factors include operating efficiency, availability of customer service and equipment maintenance, and compliance with stringent industrial, environmental, and safety standards.

The United States is the largest single market for most of the product categories that constitute miscellaneous equipment. Hence, U.S. firms incur smaller transportation and distribution costs in the U.S. market than foreign manufacturers because of proximity to the market. Producers are typically located near markets where end-user industries are sizeable. This competitive advantage enhances the strength of U.S. producers in their efforts to try to increase their share of world exports for most of the products in this sector.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

Presently, U.S. tariff rates for miscellaneous equipment range from free to 9 percent ad valorem. The United States has agreed to a sector-wide reduction in trade-weighted duty rates from 3.6 to 2 percent ad valorem, representing a reduction of 45 percent (1.6 percentage points). Principal trading partners for the miscellaneous equipment sector are Japan, Canada, the EU, and Mexico;³ Japan represents the primary GATT market for U.S. exports. Tariff rates in Japan range from a base rate of zero to 6.8 percent ad valorem for certain types of cigarette-making

³ The implementation of the North American Free-Trade Agreement (NAFTA) in Jan. 1994 has resulted in duty-free treatment for nearly all U.S. imports of miscellaneous equipment from Canada and Mexico. In 1993, U.S. imports of these products from Canada and Mexico amounted to 15.8 and 6 percent, respectively, whereas, U.S. exports represented 26.3 and 9 percent, respectively, of total trade.

machines; Japan has agreed to reduce all tariffs to zero. Tariff rates in the EU vary from zero to 7.0 percent ad valorem for molding boxes and patterns. The largest tariff reductions were offered by the EU for valves and taps (reduced from 4.6 to 2.2 percent ad valorem) and certain pumps for liquid (5.3 to 2.7 percent ad valorem).

Other Provisions

Miscellaneous equipment producers are affected by a modest number of market access impediments, the principal one being discriminatory procurement practices or "buy national" preferences prevalent in the EU and Japan. Liberalization of the Government Procurement Code⁴ could offer new opportunities for U.S. firms to learn of bid opportunities in the EU and Japan, prepare adequately for them, and be able to challenge them if bids are awarded unfairly.⁵

Likely Impact on U.S. Trade

The URA are likely to have a small positive effect on trade in this sector. According to the Commission's sectoral model, the URA are likely to result in a small increase in U.S. imports. The effect of the URA likely will be modified because a significant portion of U.S. imports already enter duty-free or at reduced duties under the North American Free-Trade Agreement (NAFTA).

The URA likely will result in a small increase in U.S. exports. Reductions in tariffs in GATT-member nations should further enhance the competitiveness of U.S. products in the world market and result in new sales opportunities for U.S. producers. However, in those major markets in which the tariff rates on U.S. exports are likely to decline (Japan and Korea), the current level of tariffs is near zero. In these markets, nontariff barriers, such as government procurement regulations, have been more likely to affect U.S. exports; the government procurement agreement is likely to increase access somewhat. In the past, major U.S. producers of this equipment have established production ties in these markets in order to ameliorate these internal market barriers.

⁴ Agreement on Government Procurement, Annex 4B, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. A revised text is expected to enter into force January 1, 1996. The revised text seeks to increase transparency in the laws, regulations, procedures, and practices relating to government procurement and seeks to ensure that they are not used as barriers to trade. Negotiations to expand coverage to subcentral governments and government-owned utilities will continue with the EU, Japan, and Canada.

⁵ Official of the Valve Manufacturers Association, U.S. International Trade Commission (USITC) staff telephone interview, Mar. 26, 1994.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, U.S. employment and production in this sector likely will increase by a negligible amount as a result of the URA. Decreased production and employment as a result of increased imports will be more than offset by a rise in exports of miscellaneous equipment.

The impact of the URA on U.S. industrial consumers of these products is likely to be negligible, due to a negligible decrease in the price of U.S. products and a small decline in the prices of imports. Increased imports from GATT countries may increase the variety of available products, contributing to the negligible gain by U.S. consumers.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Capital Goods for Trade Policy Matters (ISAC 2) has tentatively endorsed the Final Act embodying the results of the URA.⁶ Officials from the Valve Manufacturers Association and the Society of the Plastics Industry have indicated their agreement with the ISAC 2 position.⁷

⁶ *Report of the Industry Sector and Functional Advisory Committees (ISAC/IFAC) on the Uruguay Multilateral Trade Negotiations*, Jan. 1994.

⁷ Official of the Valve Manufacturers Association, USITC staff telephone interview, Mar. 26, 1994; and official of the Society of the Plastics Industry, USITC staff telephone interview, Mar. 19, 1994.

PART VII
LIKELY IMPACT OF THE URA ON
U.S. ELECTRONICS SECTORS

Summary of the Likely Impact of the URA on U.S. Electronics Sectors

- U.S. electronics sectors covered in detail in this report include computers and office equipment, telephone and telegraph apparatus and optical cable, consumer electronic products, recorded media, semiconductors and other electronic components, instruments, medical equipment, and photographic and optical equipment and materials.
- U.S. electronics sectors are generally highly competitive internationally, with the exception of the consumer electronic products sector. Major global competitors in these sectors include Japan and the European Union.
- Under the URA, sector products will face lower tariffs, which currently range from zero to 6.5 percent ad valorem. Tariffs on medical equipment are scheduled to be eliminated under a zero-for-zero agreement.
- In addition to tariff provisions of the Uruguay Round Agreements (URA), the agreement on trade-related intellectual property rights also is expected to significantly affect U.S. electronic sectors because increased protection of copyrights and emerging technologies likely will increase revenues and help maintain the high levels of research and development. Trade also likely will benefit from increased transparency and standardization of procedures associated with agreements on rules of origin (particularly important for components of computers and office equipment, telephone and telegraph apparatus, semiconductors, instruments, and photographic equipment); customs valuation (instruments and photographic equipment); and technical barriers to trade (instruments and medical equipment).
- The URA are expected to have a generally beneficial impact on the U.S. electronics sectors, with negligible to modest growth (15 percent or less) in net trade. Spurred by higher exports, production and employment in these sectors are likely to experience negligible to small increases (5 percent or less), with modest growth in the recorded media sector. Trade balances in telephone and telegraph apparatus and in consumer electronic products are expected to undergo modest and negligible (1 percent or less) declines, respectively, as import growth exceeds export expansion. Employment and production in these two sectors likely will decline negligibly.

CHAPTER 45

Computers and Office Equipment¹

Table 45-1
Computers and office equipment: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	380	337	319	-16.1
Trade data (million dollars):				
Shipments	63,575	59,756	63,753	0.3
U.S. exports:				
Total	25,954	26,988	27,167	4.7
GATT ² signatories	24,914	25,782	25,950	4.2
Other	1,040	1,206	1,217	17.1
U.S. imports:				
Total	29,946	36,142	42,958	43.4
GATT signatories	25,905	31,004	36,697	41.7
Other	4,041	5,138	6,261	54.9
U.S. trade balance:				
Total	-3,992	-9,154	-15,791	(³)
GATT signatories	-991	-5,222	-10,747	(³)
Other	-3,001	-3,932	-5,044	(³)
Consumption	67,567	68,910	79,544	17.7
Import market share (percent):				
Total	44.3	52.4	54.0	(³)
GATT signatories	38.3	45.0	46.1	(³)
Other	6.0	7.5	7.9	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.-Percentage changes are based on rounded figures, and totals may not add due to rounding.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will result in a negligible increase (1 percent or less) in U.S.

¹ The following product groups are covered in the discussion of this industry sector: computers, computer components, computer peripherals, and office machines. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to

imports and a small increase (over 1 percent to 5 percent) in U.S. exports, generating a small improvement in the trade deficit for the computers and office equipment sector. U.S. production of computers and office equipment likely will show a small increase. The URA likely will have a negligible effect on U.S. sector employment, as cost pressures continue to force firms to reduce payrolls. The effect on U.S. consumers most likely will be positive but negligible. Fierce price

²-Continued

reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. I and app. E.

competition and decreasing product life cycles will continue to overshadow any effect due to the URA. In addition to tariff reductions, URA provisions likely to affect this sector are those concerning rules of origin and trade-related intellectual property rights (TRIPs).

The global market for computers and office equipment reached \$220 billion in 1993. Production in the United States accounts for approximately 29 percent of world demand for these products, and 46 percent of U.S. consumption. Currently, production of computers and office equipment is concentrated in the United States, Europe, and Southeast Asia. Within the United States, production is concentrated in California, the Northeast, and Texas.

U.S. producers are highly globalized, maintaining manufacturing and marketing subsidiaries and subcontractors in all major world markets. U.S. firms producing worldwide account for over 60 percent of global computer and office machine revenues. U.S. firms produce throughout the world for several reasons. Relatively high European tariffs on computer products keep the costs of exporting to the European Union (EU) high, thereby encouraging U.S. firms to establish production inside the EU. In addition, many U.S. firms have facilities in East Asia to be close to component suppliers and to take advantage of the region's relatively low wage rates. U.S. firms invest in all of these regions to better serve local markets and adapt their products accordingly.

Employment in the U.S. computer and office equipment industry has decreased annually over the past 5 years, as previously high-technology products have faced increased price competition as they have become commodity products. In addition, many firms in the computer industry are in the midst of restructuring, due to the shift in consumer demand away from mainframes toward personal computers and workstations.

The worldwide computer and office equipment sector is very competitive, and price is often the final determinant in purchasing decisions. Because prices are critical, U.S. computer and office machine firms increasingly rely upon cheaper offshore sourcing of components for their products. As computer and office equipment firms struggle to maintain profit margins, those that can market new technologies successfully tend to be most prosperous. In order to compete in this quickly changing industry and continue to offer the latest technologies, firms spend 4 to 22 percent of revenues annually on research and development (R&D).³

³ 1993 Company Annual reports.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

Tariffs for computers and office machines are generally low in GATT and non-GATT countries, with tariffs in most countries ranging only up to 4.99 percent ad valorem. The current average calculated tariff rate for U.S. imports of computers and office machines is 3.7 percent ad valorem. The United States has agreed to reduce its average calculated duty rate to 2.42 percent ad valorem under the URA. The highest U.S. tariff in this sector was 4.9 percent on analog or hybrid computers; the new high rate under the URA is to be 3.7 percent ad valorem for certain electrostatic photocopying apparatus.

The average duty rate for Europe is 4.59 percent ad valorem, while Japan's average tariff rate is 4.99 percent ad valorem. Japan suspended its tariffs on computers and office machines in 1986. Using various means, Europe has agreed to reduce the effective duty rate by 3.03 percentage points over ten years, and Japan has agreed to bind duties at zero immediately.

GATT signatories India and Brazil have agreed to reduce their tariffs, but will continue to impose much higher tariffs than other nations. Brazilian tariffs now range from 30 to 35 percent, and existing fees, such as customs surcharges and various taxes, can increase import costs by an additional 40 percent. Some of India's effective tariffs on computer products and office machines reached 131 percent in November 1993. India's budget for 1994-95 reduces the maximum tariff from 85 to 65 percent ad valorem. However, there have been no reductions in India's excise taxes, which increase effective tariff rates by 30 to 50 percent.

Non-GATT signatory China has reduced its tariff independently of the Uruguay Round to allow greater legal access to emerging technologies.⁵ China will reduce its tariffs in 1994 from 50 percent to 20 percent, and experts predict further reductions this year.⁶

⁴ India imposes excise taxes on domestic and imported products. However, the tax is assessed on the value of the product including import tariffs. Given the high tariff rates on computers, this method of assessment and taxation effectively increases duties by 30 to 50 percent.

⁵ The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

⁶ U.S. Department of Commerce, International Trade Administration, "China - Computer Import Profile," *Market Research Reports*, Sept. 25, 1993.

Currently, the Chinese, Brazilian, and Indian markets for computers and office machines are quite small, but they are expected to grow rapidly.

Other Provisions

Other URA provisions most likely to affect this sector are those covering rules of origin⁷ and TRIPs.⁸ These agreements increase in importance as computer and office machine manufacturers globalize production and enter new markets.

Currently, U.S. computer and office machine companies must document the origin of components in order to meet different rules of origin in various export markets. Such documentation is expensive. Moreover, the globalization of production and distribution, coupled with the use of multiple component suppliers worldwide, often make it difficult for firms to adjust production in response to differing rules of origin. The URA on rules of origin⁹ is anticipated to create a clear, concise, international method of determining origin.¹⁰

Intellectual property protection is an important issue in the computer industry because emerging technologies generate the greatest profits. U.S. firms

⁷ Agreement on Rules of Origin, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement sets forth a timetable under which GATT rules of origin will be developed and implemented. The agreement establishes a working committee to consult with the Customs Cooperation Council, a non-GATT entity, in developing GATT rules of origin. The agreement is intended to ensure that such rules are clear and are applied in an impartial, transparent, predictable, consistent, and neutral manner.

⁸ Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex IC, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope, and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

⁹ Agreement on Rules of Origin, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement sets forth a timetable under which GATT rules of origin will be developed and implemented. The agreement establishes a working committee to consult with the Customs Cooperation Council, a non-GATT entity, in developing GATT rules of origin. The agreement is intended to ensure that such rules are clear and are applied in an impartial, transparent, predictable, consistent, and neutral manner.

¹⁰ Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex IC, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The

lead the world in computer technology advances and invest large shares of their revenue in R&D. Intellectual property protection is weakest in developing countries, such as India and Brazil, which have the fastest growing computer markets in the world. The TRIPs agreement¹¹ expands intellectual property protection to all GATT signatories, including developing countries that have poor records in this area. The TRIPs agreement is expected to offer more effective protection of patents, copyrights, and trade secrets, all of which affect innovative firms in the computer industry.

Likely Impact on U.S. Trade

Improvement in the U.S. trade balance due to the URA likely will be small. According to the Commission's sectoral model and qualitative staff analysis, U.S. imports of office machine and computer components likely will increase by a negligible amount. Increased production of computers and office machines within the United States most likely will increase the demand for components currently imported from Japan and Asia.

The URA likely will increase U.S. exports by a small amount, due to the slight reduction in foreign tariffs. However, tariff reductions in developing countries, such as India, Thailand, and Indonesia, may benefit U.S. producers by opening up emerging markets to U.S. exports.¹² In addition, the rules of origin and TRIPs agreements likely will contribute to the small increase in exports.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model and qualitative staff analysis, the URA are likely to result in a small increase in U.S. production of computer and office machines. Increased imports of components are not likely to have an effect on production or employment since most of these products are manufactured solely overseas. Reductions in tariffs for office machine components will enable U.S. firms to maintain current employment levels instead of creating

¹⁰—Continued

agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope, and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

¹¹ Report of the Industry Sector Advisory Committee on Electronics and Instrumentation for Trade Policy Matters (ISAC 5) on the Uruguay Round of Multilateral Trade Negotiations, Jan. 1994, p. 19.

¹² Industry representative, U.S. International Trade Commission (USITC) staff telephone interview, Mar. 1, 1994.

jobs elsewhere.¹³ However, employment in the U.S. computer industry likely will continue to fall, as it has in recent years, for reasons unrelated to the URA.

U.S. consumers are likely to experience a negligible decrease in computer and office equipment prices due to the URA. The TRIPs agreement should have little effect on imports into the United States. The effects of the rules of origin provision cannot be analyzed until the new rules are established, agreed upon, and implemented. U.S. tariff reductions on these products are minimal in comparison to recent price reductions of 20 to 50 percent per year on computer and office machine products (largely due to technology changes and competitive factors), which are often purchased on the basis of price.

U.S. Industry Positions on the URA

U.S. firms overwhelmingly support the URA. Industry representatives report that tariff reductions likely will have a significantly beneficial effect on the computer and office machine industry. Moreover, industry sources maintain that they are pleased with the TRIPs and rules of origin provisions, the financial implications of which are much more difficult to quantify than tariff reductions.

After all of the tariff reductions are in place, the U.S. computer industry expects to save hundreds of millions of dollars in duties from reduced tariffs in Europe.¹⁴ In addition, firms with limited production in

¹³ However, the changes in rules of origin will be developed over the next three years, precluding analysis of its disadvantages and benefits.

¹⁴ Industry representatives, USITC staff telephone interviews, Mar. 1-21, 1994.

Europe claim that the tariff savings will allow them to continue their current level of R&D spending in the United States, which might otherwise be reduced.¹⁵ Office machine producers report that the reduction of U.S. tariffs on components will motivate photocopy manufacturers to continue operating in the United States.¹⁶

The industry sees the rules of origin provision as the beginning of international efforts to establish trade rules that are clearer and more concise. Industry representatives state that the practicality of such rules will remain unclear until the Customs Cooperation Council (CCC) provides the results of its scheduled three-year harmonization exercise. Benefits from this arrangement include simplification of complex rules of origin and harmonization of contradictory rules of origin.¹⁷ However, U.S. firms are concerned that the CCC will derive a "value-added" method of calculating origin that would be virtually impossible to document.¹⁸

In general, industry representatives are encouraged by the inclusion of all GATT signatories under the new TRIPs rules; in the past, countries could elect not to sign such provisions. However, representatives estimate that the 5 to 11 year implementation period for less-developed countries will cost U.S. firms over \$1.8 billion in lost revenues.¹⁹

¹⁵ Industry representative, USITC staff telephone interview, Mar. 8, 1994.

¹⁶ Industry representatives, USITC staff telephone interviews, Mar. 1, 1994.

¹⁷ *ISAC 5 Report*, Jan. 1994, p. 24.

¹⁸ Industry representatives, USITC staff telephone interviews, Mar. 1-10, 1994.

¹⁹ Joseph Tasker Jr., Compaq Computer Corp., on behalf of the Computer and Business Equipment Manufacturers Association, testimony to the House Ways and Means Subcommittee on Trade on the GAIT Uruguay Round, Feb. 22, 1994, p. 3.

CHAPTER 46

Telephone and Telegraph Apparatus and Optical Cables

Table 46-1
Telephone and telegraph apparatus and optical cable: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	98	97	96	-2.6
Trade data (million dollars):				
Shipments	17,240	17,809	18,006	4.4
U.S. exports:				
Total	3,482	4,462	5,524	58.7
GATT ² signatories	3,156	4,052	4,813	52.5
Other	325	410	711	118.6
U.S. imports:				
Total	4,909	5,691	6,233	27.0
GATT signatories	4,228	4,851	5,260	24.4
Other	681	840	973	42.9
U.S. trade balance:				
Total	-1,427	-1,228	-708	(³)
GATT signatories	-1,072	-798	-447	(³)
Other	-356	-430	-262	(³)
Consumption	18,667	19,038	18,715	0.3
Import market share (percent):				
Total	26.3	29.9	33.3	(³)
GATT signatories	22.6	25.5	28.1	(³)
Other	3.6	4.4	5.2	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures, and totals may not add due to rounding.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) are expected to produce a modest (over 5 percent to 15

¹ See app. F, vol. II for trade tables for this sector.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

percent) increase in U.S. exports and imports, and likely will result in a modest net increase in the trade deficit for the telephone and telegraph apparatus and optical cable sector. The URA likely will cause a negligible decrease (1 percent or less) in U.S. sector production and employment, and will have a small positive impact (over 1 percent to 5 percent) on U.S. consumers. In addition to tariff reductions, URA provisions on trade-related intellectual property rights (TRIPS) and rules of origin will have a positive effect on this sector.

U.S. companies are highly competitive in the global market for telecommunication equipment and fiber optic cable. In 1993, U.S. firms accounted for

approximately 21 percent of global telecommunication apparatus production³ and an estimated 47 percent of world fiber optic production.⁴ U.S. shipments supply over 65 percent of the domestic market. The competitiveness of U.S. firms in the telecommunication and fiber optic sector is a direct result of these firms' technological sophistication, which is required for manufacturing high-end telecommunication products, such as switches, that demand complex software. Most of the companies involved in this sector are multinationals with highly globalized production and sourcing strategies. The majority of U.S. competitors are also multinational companies and primarily are based in Canada, Japan, France, and Germany. The largest U.S. and world markets for products in this sector include Canada, Japan, Mexico, Europe, and China.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The 1993 U.S. tariff rates for imports of telecommunication and fiber optic equipment ranged from 4.7 to 8.5 percent ad valorem. Tariffs imposed by principal U.S. trading partners range from relatively low levels in most developed markets, to high tariffs in some emerging markets. Japan and Canada, the top two foreign markets for U.S. exporters, impose no tariffs.⁵ The European Union (EU), another key export market, charges duties ranging from 5 to 8 percent on most telecommunication and fiber optic products.⁶ Tariffs assessed by emerging markets, such as Brazil, Indonesia, Malaysia, and India, are comparatively higher, reaching as high as 130 percent for some products.⁷

The United States has proposed to reduce its telecommunication tariffs by a range of zero to 50 percent, depending on the product.⁸ There are a limited

³ Elsevier, *Yearbook of World Electronics Data 1993*, vol. 4—*East Europe and World Summary*, 1993.

⁴ Industry official, U.S. International Trade Commission (USITC) staff telephone interview, Mar. 4, 1994.

⁵ Japan lists tariffs ranging from zero to 4.2 percent for products in this sector, but Japan has imposed no duties for the past several years. Industry official, USITC staff telephone interview, Mar. 22, 1994.

⁶ The exception is for certain pagers and radio receiver equipment, which face a tariff range of 12 to 14 percent.

⁷ Rates range up to 30 percent in most of these countries, but are significantly higher in India. Industry officials, USITC staff telephone interviews, Mar. 4, 18, and 23, 1994.

⁸ Many industry representatives encouraged "zero-for-zero" tariffs for telecommunication equipment, though some preferred to maintain tariffs on fiber optics. Industry officials, USITC telephone interviews, Mar. 3 and 4, 1994.

number of products for which tariffs have not been reduced, including the majority of fiber optic equipment. The average calculated tariff rate for the sector as a whole is to be reduced from 6.4 to 1.6 percent ad valorem. The proposed duty reductions submitted by U.S. trading partners vary widely, ranging up to 50 percent in some cases. For the EU, the estimated tariff for this sector under the URA is 4.5 percent.

Other Provisions

Other URA provisions that are most likely to affect the telecommunication and fiber optic sector are those relating to TRIPs and rules of origin.

The TRIPs provisions of the URA⁹ likely will have a positive effect on trade in this sector by improving intellectual property rights standards and the mechanisms to enforce these measures. Intellectual property protection is important for many components used in the production of telecommunication equipment (e.g., software and integrated circuits), and lack of adequate protection in the past has led to lost revenues and trade disputes. Improved protection should increase returns on research and development investments for U.S. companies.

The Agreement on Rules of Origin¹⁰ will impact the telecommunication and fiber optic industries through its potential to harmonize and simplify nonpreferential rules of origin. Conflicting rules of origin have hindered trade among globalized industries in the past. If harmonization is imposed, trade in sector products likely will become less expensive and less time-consuming than it is under existing rules.

Likely Impact on U.S. Trade

The trading environment created by the URA's reduced tariffs and enhanced market access provisions may increase the U.S. trade deficit modestly for this sector, since the projected increase in imports exceeds

⁹ Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs), Including Trade in Counterfeit Goods, Annex IC, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope, and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

¹⁰ Agreement on Rules of Origin, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement sets forth a timetable under which GATT rules of origin will be developed and implemented. The agreement establishes a working committee to consult with the Customs Cooperation Council, a non-GATT entity, in developing GATT rules of origin. The agreement is intended to ensure that such rules are clear and are applied in an impartial, transparent, predictable, consistent, and neutral manner.

the anticipated increase in exports. Although U.S. tariffs for these products are already low, the Commission's sectoral model and qualitative staff analysis suggest that the proposed reductions likely will result in a modest increase in U.S. imports due to the price-sensitivity of certain products in the sector. Major U.S. suppliers, including Japan, Malaysia, Thailand, and Korea, will benefit from the decrease in tariffs and may increase exports to the United States.¹¹ Also contributing to this increase will be imports from China, Taiwan, and other non-GATT signatories.¹² These countries are important suppliers to the U.S. market and will benefit from reduced tariffs as a result of their most-favored-nation (MFN) status.

U.S. exports are also expected to increase modestly as a result of the URA. U.S. exports to emerging markets are likely to expand, primarily in response to reductions in tariff levels that were considered prohibitive prior to the URA.¹³ Exports to these emerging markets also will be encouraged by certain market access provisions, such as those on TRIPs.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, the URA likely will have a negligible negative impact on domestic production and employment in the telecommunication and fiber optic sector. The anticipated increase in imports will lead to a slight decrease in U.S. production, but when combined with the effects of increased U.S. exports, the overall decline is expected to be negligible. Employment in the industry likely will continue to decline slightly, in keeping with the current trend in the sector.

The location of production facilities will not be significantly affected by the URA. While the URA will remove some of the reasons for opening facilities overseas (e.g., to avoid tariffs), other factors governing production location will not change.¹⁴ One exception

¹¹ Duties for trade with Canada and Mexico will be reduced under the NAFTA. Imports from these countries totalled \$1.2 billion in 1993. For more information, see USITC, *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

¹² Taiwan formally applied for accession to the GATT in 1990. A working party was established in Sept. 1992 to consider Taiwan's membership. The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

¹³ Industry officials, USITC staff telephone interviews, Mar. 7 and 18, 1994.

¹⁴ These factors include production cost minimization and proximity to markets. Industry official, USITC staff telephone interview, Mar. 7, 1994.

may be the European market. The absence of a bilateral government procurement agreement on telecommunication equipment may encourage some U.S. companies to expand their production efforts in the EU to meet domestic content requirements.¹⁵

The impact of the URA on U.S. consumers of these products is likely to be positive but small, due to a negligible decrease in the price of U.S. products and a small decrease in the prices of GATT and non-GATT imports.

U.S. Industry Positions on the URA

Most U.S. representatives of the telecommunication and fiber optic sector support the URA's provisions to reduce tariffs, strengthen intellectual property protection, and harmonize rules of origin. These agreements are expected to reduce costs for U.S. companies and improve market opportunities.

Tariff reductions in this sector likely will prove especially beneficial in two areas. First, U.S. companies are pleased to see reductions in foreign tariffs on fiber optics, since fiber optic equipment is becoming increasingly price-sensitive in the global market.¹⁶ Second, as developing countries reduce tariffs on telecommunication equipment, the ability of U.S. companies to enter these markets will be greatly enhanced. Many of these countries imposed prohibitively high tariffs prior to the URA.¹⁷

Industry representatives also support improved TRIPs protection. Many of the components and research required for the production of sophisticated telecommunication equipment are considered intellectual property. Increased standards of protection, as well as the establishment of effective enforcement mechanisms, are expected to significantly improve the international market environment for U.S. companies.¹⁸

Finally, the industry believes that efforts to harmonize and simplify rules of origin will benefit this sector. Because high-technology products rely on

¹⁵ Industry official, USITC staff telephone interview, Mar. 3, 1994.

¹⁶ Industry official, USITC staff telephone interview, Mar. 4, 1994.

¹⁷ Industry officials, USITC staff telephone interviews, Mar. 7 and 18, 1994.

¹⁸ While the industry supports the overall results of TRIPs, some representatives have expressed concern that U.S. laws on intellectual property protection not be diminished as a result of the URA. Industry officials, USITC staff telephone interviews, Mar. 4 and 18, 1994.

internationally-sourced components, harmonized rules of origin could significantly reduce border delays and expensive paperwork.¹⁹ Furthermore, increased transparency in the administration of these rules should help prevent trade from being discouraged by unclear rules.

¹⁹ In order for this to occur, U.S. industry representatives recommend that new rules base the definition of "substantial transformation" on "change-in-tariff" classifications rather than on a "quantification of commercial inputs." The "change-in-tariff" classification approach determines that substantial transformation has taken place only when a good changes tariff classifications. The quantification of inputs requires an expensive and highly-cumbersome component tracking system.

Full industry support of the URA is hindered by the absence of an EU procurement agreement.²⁰ U.S. negotiators reportedly had hoped to remove discriminatory procurement practices by the government-owned telecommunications utilities (Postal, Telephone, and Telegraph (PTTs)) in the EU. The PTTs are the largest purchasers of telecommunication equipment in the EU marketplace, but they currently provide preferences to domestic suppliers. The United States and Europe did not reach agreement on telecommunication procurement by the April 15 deadline.

²⁰ Industry officials, USITC staff telephone interviews, Mar. 3 and 20, and May 11, 1994.

CHAPTER 47

Consumer Electronics¹⁾

Table 47-1
Consumer electronics: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	169	164	161	-4.7
Trade data (million dollars):				
Shipments	23,321	24,086	24,992	7.2
U.S. exports:				
Total	8,609	9,155	10,256	19.1
GATT ² signatories	7,808	8,282	8,944	14.6
Other	801	873	1,312	63.8
U.S. imports:				
Total	20,368	21,971	23,593	15.8
GATT signatories	18,063	19,349	20,502	13.5
Other	2,306	2,622	3,091	34.0
U.S. trade balance:				
Total	-11,760	-12,816	-11,067	(3)
GATT signatories	-10,255	-11,067	-11,558	(3)
Other	-1,505	-1,749	-1,778	(3)
Consumption	35,080	36,902	38,329	9.3
Import market share (percent):				
Total	58.1	59.5	61.6	(3)
GATT signatories	51.5	52.4	53.5	(3)
Other	6.6	7.1	8.1	(3)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.-Percentage changes are based on rounded figures, and totals may not add due to rounding.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² ***and U.S. Competitive Position***

The Uruguay Round Agreements (URA) likely will result in a small increase (over 1 percent to 5 percent) in U.S. imports and a negligible increase (1 percent or

less) in U.S. exports, contributing to a negligible further increase in the U.S. trade deficit for the

The following product groups are covered in the discussion of this industry sector: microphones, loudspeakers, audio amplifiers and combinations thereof; tape recorders, tape players, video cassette recorders, turntables, and compact disc players; unrecorded magnetic tapes, discs, and other media; radio transmission and reception apparatus, and combinations thereof; television receivers and video monitors and combinations including

less) in U.S. exports, contributing to a negligible further increase in the U.S. trade deficit for the

¹-Continued

television receivers; television apparatus (except receivers and monitors), including cameras, camcorders, and cable apparatus; electric sound and visual signaling apparatus; and television picture tubes and other cathode-ray tubes. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

consumer electronics sector. The URA will have a negligible negative effect on U.S. production and employment, and a small positive effect on consumers. Other than tariff reductions, no URA provisions are expected to significantly affect this sector.

World shipments of consumer electronics totaled \$121 billion in 1993, of which the United States accounted for about 20 percent. Radio transmission and reception apparatus, blank media, and television receivers comprised over 75 percent of U.S. shipments in 1993. The United States does not produce consumer electronics for export in significant quantities. There are major product areas—videocassette recorders (VCRs) and portable radiobroadcast receivers and combinations—where the United States has no commercial producers.

The United States imports the majority of consumer electronics that it consumes. In 1993, U.S. imports accounted for about 62 percent of U.S. consumption. Over two-thirds of imports of consumer electronics were traditional products, such as broadcast radio and TV receivers, tape recorders and players, and VCRs. The principal factors affecting competition in the consumer electronics industry are price, which is affected by transportation costs, and product features. For traditional consumer electronics, Southeast Asia enjoys a comparative advantage due to the availability of component suppliers, trained labor, and lower labor rates. For products where the cost of transportation is significant, such as television receivers, companies that produce in the U.S. market are more competitive than importers. For radio communications equipment, the advanced technology of U.S. producers, coupled with experience in the large U.S. market for mobile electronics, give U.S. producers a competitive advantage.

Most U.S. television receiver producers are owned by Japanese, Dutch, or French firms. There is only one major U.S.-owned television producer, Zenith Electronics Corp. (Zenith).

Key Uruguay Round Agreements Affecting Sector

Tariff Provisions

The current U.S. average calculated tariff for consumer electronic products is 4.4 percent ad valorem, ranging from zero to 15 percent ad valorem. The calculated duty rate on imports of radio apparatus, which accounted for the majority of U.S. imports in 1993, was 4.6 percent; on audio and video recording and reproducing apparatus, 3.9 percent; and on television receivers and video monitors, 4.7 percent. The U.S. average calculated tariff rate for imports are to decrease 3.2 percentage points under the URA to 1.2 percent ad valorem. The average trade-weighted duty faced by U.S. exports of consumer electronics products

is about 5.2 percentage points. That duty is to be reduced by about 3.6 percentage points as a result of the URA. Japan, one of the United States' major trading partners in this sector, has offered to reduce duty rates on these products to zero.

Other Provisions

No other provisions of the URA are expected to have a significant effect on this sector.

Likely Impact on U.S. Trade

According to the Commission's sectoral model and USITC staff analysis, the URA likely will have a negligible negative effect on the U.S. trade balance. Decreases in foreign tariffs likely will result in a negligible increase in U.S. exports. Reductions in U.S. tariffs likely will result in a small increase in U.S. imports from both GATT signatories and non-GATT countries. Trade with Canada and Mexico is significant, accounting for 17 percent of U.S. imports and 32 percent of U.S. exports of consumer electronics.³ Significant geographic shifts in trade as a result of the URA are unlikely.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, the URA likely will result in negligible decreases in U.S. production and employment. Decreases in production and employment due to increased imports will be largely offset by increases due to increased exports.

The impact of the URA on U.S. consumers of these products is likely to be positive but small, due to a negligible decrease in the price of U.S. products and a small fall in the prices of GATT and non-GATT imports. Increased imports from GATT countries may increase the variety of available products, contributing to the small gain by U.S. consumers.

U.S. Industry Positions on the URA

Officials of the U.S. consumer electronics sector generally support the URA as concluded. Most companies and associations contacted by U.S. International Trade Commission (USITC) staff for

³ Duties for trade with Canada and Mexico will be reduced under the North American Free-Trade Agreement (NAFTA). For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

their opinions regarding the effect of the URA on this sector identified no single provision as having a major impact, generally indicating that anything that promoted free trade was to the benefit of all!

Certain domestic producers have expressed concern that the United States retain effective antidumping laws.⁵ Zenith, a U.S. producer of color

⁴ U.S. industry officials, USITC staff telephone conversations, Mar. 1994; and *Report of the Industry Sector and Functional Advisory Committees (ISAC/ISAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994, pp. 9-11.

⁵ Zenith Electronics Corp. (Chicago, IL), official submission to USITC, Apr. 29, 1994.

televisions and color television components, cited concern about component and cost percentages that must be applied before a circumvention duty may be imposed; the use of average, rather than actual, U.S. prices and below-cost sales in the foreign market; and new "standing" principles that may make investigations harder to initiate. Zenith also notes that the effect of the URA on enforcement of U.S. antidumping laws depends on the implementing legislation. The "sunset" provision for antidumping orders is also of concern. U.S. producers expressed the view that the burden of proof with regard to the revocation of antidumping orders under the sunset provision should not be placed on domestic producers.

CHAPTER 48

Recorded Media¹

Table 48-1
Recorded media: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	153	167	181	18.3
Trade data (million dollars):				
Shipments	34,700	39,300	44,200	27.4
U.S. exports:				
Total	2,201	2,756	3,281	49.1
GATT ² signatories	2,128	2,641	3,143	47.7
Other	73	115	137	87.5
U.S. imports:				
Total	379	522	616	62.8
GATT signatories	361	493	583	61.5
Other	17	29	33	90.0
U.S. trade balance:				
Total	1,822	2,234	2,664	(³)
GATT signatories	1,766	2,148	2,560	(³)
Other	56	86	104	(³)
Consumption	32,878	37,066	41,536	26.3
Import market share (percent):				
Total	1.2	1.4	1.5	(³)
GATT signatories	1.1	1.3	1.4	(³)
Other	0.1	0.1	0.1	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures, and totals may not add due to rounding.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will have a modest (over 5 percent to 15 percent) favorable

¹ The following product group is covered in the discussion of this industry sector: records, tapes, compact discs, computer software, and other recorded media. See app. F, vol II, for trade tables for this sector and this group. The production and distribution of movie films, as distinct from movies recorded on videotape and videodisc, are discussed in ch. 59, Audiovisual Services.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely

effect on net U.S. trade and employment in the recorded media sector, a small (over 1 percent to 5 percent) increase in U.S. production, and a negligible or small gain (up to 5 percent) for consumers. These effects will be due to tariff reductions and conclusion of an agreement strengthening trade-related intellectual property rights (TRIPs) protection.

²—Continued
impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

In 1993, the U.S. recorded media sector supplied approximately 99 percent of the U.S. domestic market and approximately 45 percent of the world market.³ The U.S. software industry supplied approximately 45 percent of the \$72-billion world market for computer software in 1993.⁴ In the same year, the U.S. audio recording industry supplied approximately 40 percent of a \$20-billion world market for tapes, records, compact discs, and music videos. The U.S. film industry supplied nearly half of a global videocassette and videodisc market of \$5 to \$7 billion in 1993.⁵

U.S. recorded media are exported throughout the world, with about 25 percent of exports going to Canada and another 29 percent to Japan, Germany, and the United Kingdom in 1993. These same four countries were responsible for 58 percent of U.S. imports in 1993, led by Canada with 28 percent and the United Kingdom with 12 percent.

The U.S. computer software industry is concentrated in California, the Pacific Northwest, and Massachusetts. This industry's favorable global competitive position is due largely to the technical leadership of U.S. software firms and the role of the U.S. software market in setting de facto technical standards for the world market. The audio recording industry is concentrated in California and the Northeast, and the film industry is located primarily in California. The favorable global competitive position of these segments is due primarily to the worldwide popularity of U.S. recording artists and filmmakers.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

In 1993 the average calculated duty on U.S. imports of recorded media was 0.76 percent ad valorem, ranging from zero to 5.3 percent ad valorem for video discs. Duties on most products were based on area of recording surface. Under the URA, the United States has agreed to reduce duty rates by 50 percent on

³ When foreign operations are considered, U.S. firms supplied approximately 60 percent of world demand during 1993. Income from foreign operations is not included in the trade statistics reported here.

⁴ Estimates of the size of the software market vary widely. The figures here are those of International Data Corporation for packaged commercial software, as reported in Department of Commerce, International Trade Administration, *U.S. Industrial Outlook 1994* (Washington, D.C.: U.S. Government Printing Office), Jan. 1994. Including production by foreign subsidiaries and licensees, the U.S. software industry supplied approximately 74 percent of world demand.

⁵ Including foreign subsidiaries, U.S. audio recording firms served approximately half the world market, and U.S. videocassette and videodisc suppliers served over half the world market.

all products except video tape recordings, for which rates are to be reduced to zero. This will reduce the average calculated duty rate by 0.44 percentage point to 0.32 percent ad valorem.

Tariffs on U.S. exports of recorded media to major foreign markets are to be reduced under the URA by an average of approximately 1.6 percentage points, from an average 4.8 to 3.2 percent ad valorem. Duties on exports to Japan, the largest market after Canada,⁶ are to be reduced from 1.7 percent ad valorem on most media to zero for all media. Duties on exports to members of the European Union (EU), which together receive 30 percent of U.S. exports, are to be reduced from 4.9 percent ad valorem for phonograph records and audio compact discs and 5.1 percent ad valorem for audio and video tapes to 3.5 percent for most media and 2.6 percent for standard audio cassettes. EU imports of computer software and data have been and would remain free of duty. Duties on exports to Australia, another major market, are to be reduced from 20 percent to 7 percent ad valorem on tape media and would remain zero for phonograph records and compact discs.

Other Provisions

The most significant provision of the URA for the recorded media industry is the TRIPs agreement.⁷ The agreement is expected to considerably reduce the unauthorized reproduction of U.S. software and audio and video recordings in foreign countries. According to commonly accepted estimates, a substantial majority of software used in Europe, Asia, and Latin America consists of unauthorized copies, resulting in losses of over \$10 billion annually, mostly to U.S. companies.⁸ Many audio and video recordings marketed in Asia are also unauthorized copies. U.S. law already protects intellectual property rights at a level commensurate with TRIPs.

Likely Impact on U.S. Trade

The URA likely will lead to a small increase in total U.S. trade in recorded media and a modest (over 5 percent to 15 percent) increase in the sectoral trade surplus. According to the Commission's sectoral

⁶ Canadian duties will be eliminated under the provisions of the North American Free-Trade Agreement (NAFTA).

⁷ Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex IC, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope, and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

⁸ Business Software Alliance, news release, June 2, 1993. Estimates are for 1992.

models and USITC staff analyses, tariff reductions are expected to lead to a small increase in U.S. exports of recorded media and a negligible (1 percent or less) increase in U.S. imports. The impact on exports is expected to be greater than the effect on imports because tariff rates in major foreign markets are to be reduced by more than three times the reduction in U.S. rates. Moreover, the TRIPs agreement would have a more significant effect on U.S. exports than would tariff reductions under the URA. It is expected that exports would increase modestly due to the combined effect of TRIPs and tariff reduction.

Likely Impact on U.S. Production, Employment, and Consumers

The URA likely will lead to a small increase in U.S. production and a modest increase in U.S. employment in the recorded media sector. According to the Commission's sectoral model, the URA tariff reductions likely will have a positive but negligible effect on U.S. production and employment as increases in production and employment due to increased exports will be partially offset by decreases due to increased imports. In addition, the increased exports that result from the TRIPs agreement likely will lead to additional increases in both U.S. production and employment. Furthermore, increased sales by foreign subsidiaries and licensees as a result of the TRIPs agreement could lead to still greater employment gains in product development activities directed specifically toward foreign markets. This is likely to happen primarily in the software industry, where product development for foreign markets is already a substantial focus. Although some development activity already takes place within foreign markets, much of it currently occurs in the United States. The U.S. audio recording and film industries focus their product development activities more exclusively on the U.S. market, so TRIPs provisions likely would lead to a negligible or small increase in production and employment in these industries. Most of the production and employment gains in recorded media would occur in California, the Pacific Northwest, and Massachusetts.

The impact of the URA on U.S. consumers of recorded media likely would be positive, but negligible or small in extent. The URA likely will lead to

negligible decreases in the prices of U.S. products and both GATT and non-GATT imports. Increased imports from GATT countries, together with increased U.S. product development stimulated by foreign demand, may increase the variety of available products, contributing to the gain by U.S. consumers.

U.S. Industry Positions on the URA

The Business Software Alliance, an association concerned with protection of intellectual property, has applauded the TRIPs provisions for the protection of computer programs as literary works, and for the requirement to award damages to copyright owners in cases of violation.⁹ Similarly, the Information Technology Association of America and several computer software firms have indicated their satisfaction with the TRIPs agreement, although they have expressed concern over the 5- to 11-year period before the agreement comes fully into force for developing countries.¹⁰ The Recording Industry Association of America has expressed concern over the failure of TRIPs provisions to clarify how national treatment is to be applied to intellectual property.¹¹ The International Intellectual Property Alliance and the Motion Picture Exporters Association of America, Inc. have also expressed concern over the long transition period and the actual treatment issue.¹² These reservations mirror those expressed in the report on the URA by the Industry Functional Advisory Committee on Intellectual Property Rights (IFAC 3) for Trade Policy Matters.¹³

⁹ Business Software Alliance, news release, Dec. 15, 1993.

¹⁰ Industry officials, U.S. International Trade Commission (USITC) staff telephone interviews, Mar. 1-10, 1994.

¹¹ Recording Industry Association of America, news release, Jan. 18, 1994. The audio recording and film industries have also commented extensively on provisions related to entertainment services (see ch. 58).

¹² International Intellectual Property Alliance (Washington, DC), official submission to USITC, May 2, 1994; and Motion Picture Export Association of America, Inc. (Washington, DC), official submission to the USITC, May 2, 1994.

¹³ *Report of the Industry Functional Advisory Committee on Intellectual Property Rights (ISAC 3) for Trade Policy Measures on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

CHAPTER 49

Semiconductors and Other Electronic Components

Table 49-1
Semiconductors and other electronic components: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	523	500	483	-7.6
Trade data (million dollars):				
Shipments	37,469	39,865	42,544	13.5
U.S. exports:				
Total	18,448	19,200	22,026	19.4
GATT ² signatories	17,067	17,543	20,153	18.1
Other	1,381	1,657	1,873	35.6
U.S. imports:				
Total	20,527	23,014	28,056	36.7
GATT signatories	19,148	21,149	25,556	33.5
Other	1,379	1,865	2,499	81.3
U.S. trade balance:				
Total	-2,079	-3,814	-6,029	(³)
GATT signatories	-2,082	-3,606	-5,403	(³)
Other	3	-208	-626	(³)
Consumption	39,548	43,679	48,573	22.8
Import market share (percent):				
Total	51.9	52.7	57.8	(³)
GATT signatories	48.4	48.4	52.6	(³)
Other	3.5	4.3	5.1	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures, and totals may not add due to rounding.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will cause a small increase (over 1 percent to 5 percent) in

The following product groups are covered in the discussion of this industry sector: electrical capacitors and resistors; apparatus for making, breaking, protecting, or connecting electrical circuits; special-purpose tubes; diodes, transistors, integrated circuits, and similar semiconductor solid-state devices; and electrical and electronic articles, apparatus, and parts not elsewhere provided for. See app. F, vol. II, for trade tables for this sector and these groups.

net U.S. trade in electronic components, improving the U.S. trade deficit. The URA likely will increase the U.S. electronic component sector's production by a small amount and increase employment by a negligible amount (1 percent or less). The URA also likely will benefit consumers by a negligible amount. The most important URA provisions likely to affect U.S.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

trade in electronic components are those concerning trade-related intellectual property rights (TRIPs) and those seeking to speed and simplify trade and investment around the globe.

The U.S. electronic components sector is the second largest in the world and a leader in the development of new product and process technologies. This industry produces a quarter of the world's production of electronic components and competes primarily with its counterparts in Japan, other Asian nations, and the European Union (EU).

U.S. producers are leaders in the production of advanced design-intensive electronic components as opposed to commodity and labor-intensive products. These producers also devote sizeable resources to research and development (R&D) and have strong software, design, and global marketing capabilities. Most U.S. production consists of semiconductors. In 1993, these devices accounted for 62 percent of sector production; printed circuit boards, 14 percent; connectors, relays, and switches, 12 percent; capacitors and resistors, 6 percent; and electronic tubes, 4 percent.

U.S. producers dominate the U.S. market, which is the largest in the world, accounting for about 30 percent of world consumption. These producers supply a third of this market through direct shipments. In addition, up to 20 percent of this market consists of U.S. exports sent abroad for further processing and subsequently returned to the United States. These exports are primarily semiconductor parts whose assembly and testing is labor-intensive and performed most economically in low-wage countries.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The current average calculated tariff rate for U.S. imports of electronic components is about 1.4 percent ad valorem. This low rate reflects the fact that semiconductors, which largely enter free of duty, account for over 60 percent of total sector imports, and that most other electronic components enter at reduced duties under Harmonized Tariff Schedule (HTS) subheading 9802.00.80 (production sharing) or special provisions, such as the Generalized Systems of Preferences (GSP), Caribbean Basin Economic Recovery Act (CBERA), or North American Free-Trade Agreement (NAFTA). Tariffs on dutiable U.S. imports of electronic components generally range from 5.8 to 10 percent ad valorem.³ Under the URA, the United States has agreed to immediately eliminate or lower duties on most of these imports, reducing the average calculated tariff rate to 0.7 percent ad valorem.

³ U.S. imports primarily consist of printed circuit boards, capacitors, connectors, relays, switches, and parts of these components.

U.S. exports of electronic components to GATT countries are subject to an average calculated ad valorem tariff rate of about 3 percent that will be reduced by half under the URA. Most U.S. exports of electronic components are subject to relatively low tariffs in most important GATT markets, except the EU and South Korea. Most exports to Canada enter free of duty under NAFTA and other special tariff provisions. Japan provides duty-free treatment to most imports of electronic components except semiconductors, which have a most-favored-nation (MFN) rate of 4.2 to 4.3 percent ad valorem. However, semiconductors originating in the United States are exempt from duties in Japan under a trilateral agreement between the United States, Japan, and Canada.⁴ U.S. exports to other Asian countries and Mexico generally enter free of duty. These exports are mainly U.S.-made parts sent for processing to trade zones and similar bonded areas and then returned to the United States.

Tariffs on exports of most components to the EU are about 6 percent ad valorem. However, tariffs on semiconductors, the main electronic component supplied to the EU from the United States, are generally 14 percent ad valorem.⁵ Under the URA, the EU has offered to halve duties on most electronic components and eliminate duties on certain semiconductor products that account for a large and growing portion of U.S. exports (e.g., microprocessors and programmable logic devices). Under the URA, South Korea has agreed to eliminate its 10-percent duty on semiconductors and its duties on most other electronic components.

Other Provisions

The most important provision likely to affect the U.S. electronic components sector concerns TRIPs.⁶ Protection of intellectual property is important to the sector's large R&D investments, as well as the high profit margins needed to finance future innovation. The TRIPs agreement is intended to provide high and uniform levels of intellectual property protection for software, integrated circuit designs, and trade secrets, that are particularly important to U.S. semiconductor producers.

⁴ Customs Tariff Schedule of Japan, 1991.

⁵ Some semiconductors enter at 9 percent and certain others that are not produced in the European Union (EU) enjoy duty suspensions.

⁶ Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex IC, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope, and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

The principal markets for U.S. exports of electronic components are Japan, the EU, and Canada, which generally provide TRIPs protection similar to that found in the United States. However, Brazil, India and other lesser developed countries, which are among the world's fastest growing and most promising markets, are not regarded as providing adequate TRIPs protection to U.S. producers. For example, Brazil has limited the ability of U.S. firms to charge royalty fees on technology transfers; provided no protection on copyrighted computer software; and inconsistently enforced its copyright, patent, and trademark legislation.

URA provisions to speed and simplify trade and investment around the globe are also important to the U.S. electronics **components sector**. The competitiveness of this sector depends on its ability to move inventories of intermediate and finished goods quickly and inexpensively and to rationalize global production. This ability is limited, particularly in lesser developed countries, by lack of transparency and uniformity in the administration of trade and foreign investment rules.

Likely Impact on U.S. Trade

According to the Commission's sectoral model and qualitative staff analysis, the URA likely will result in a small increase in U.S. electronic components trade as a result of an increase in both imports and exports. U.S. exports likely will rise somewhat more than U.S. imports, resulting in a small reduction in the U.S. trade deficit in electronic components.

The URA likely will result in a small increase in U.S. imports as the cost of investing in and trading with less developed countries diminishes. In particular, U.S., Japanese, and EU firms likely will increase their reliance on labor-intensive assemblies made in these countries. Tariff reductions likely will result in a negligible increase in U.S. imports because these tariffs are already low.

Under the URA, U.S. exports of electronic components likely will rise a small amount. The protection of intellectual property and the elimination or reduction of trade and investment barriers are likely to increase U.S. exports, particularly to lesser developed countries. U.S. exports of electronic components likely will also rise in response to tariff reductions in the EU and South Korea. Similarly, lower tariffs in Brazil, India, and other fast-growing emerging markets likely will aid efforts to expand U.S. exports.

⁷ Office of the U.S. Trade Representative, 1993 *National Trade Estimate Report on Foreign Trade Barriers* (Washington D.C., GPO, 1993), pp. 23-25 and 121-124.

Likely Impact on U.S. Production, Employment, and Consumption

According to the Commission's sectoral model and qualitative staff analysis, the URA likely will contribute to a small increase in U.S. production and a negligible increase in U.S. employment. Production and employment will be stimulated by rising U.S. exports, but tempered by the transfer of labor-intensive manufacturing to lesser developed countries. Most of the increase in production likely will take place in California and Texas, the primary States producing electronic components. Employment likely will not rise in tandem with production, as employee productivity in this industry has been rising quickly and likely will continue to do so. The impact of the URA on U.S. consumers of these products likely will be small due to a fall in the prices of imports.

U.S. Industry Positions on the URA

Representatives of the U.S. electronic components sector support the URA, most notably the URA provisions regarding tariffs and TRIPs, as well as those relating to antidumping and the elimination of barriers to global trade and investment. Although representatives sought larger tariff reductions and broader government procurement and services agreements, they regard the URA as an opportunity to increase U.S. exports and reduce barriers to investing abroad.

The Industry Sector Advisory Committee on Electronics and Instrumentation for Trade Policy Matters (ISAC 5) supports the URA, particularly the provisions regarding market access and strengthened disciplines to deal with trade distorting measures. The Committee also supported coverage of intellectual property, investment, and services issues under the URA.

⁸ George M. Scalise on behalf of the Semiconductor Industry Association, Ms. Derrel Depasse on behalf of the American Electronics Association, and Joseph Tasker, Jr., on behalf of the Computer and Business Equipment Manufacturers Association, U.S. International Trade Commission (USITC) staff telephone interviews, Mar. 1994; Semiconductor Industry Association (San Jose, CA), official submission to the USITC, May 2, 1994; and testimony to the U.S. House of Representatives, *The GATT Uruguay Round: Hearing Before the Subcommittee on Trade*, 102nd Congress, Feb. 22, 1994.

⁹ *Report of the Industry Sector and Functional Advisory Committees (ISAC/IFAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994, pp. 9-11.

CHAPTER 50

Instruments¹

Table 50-1
Instruments: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	425	406	404	-4.9
Trade data (million dollars):				
Shipments	47,010	46,580	47,877	1.8
U.S. exports:				
Total	11,112	11,393	12,245	10.2
GATT ² signatories	10,100	10,317	11,030	9.2
Other	1,012	1,076	1,215	20.0
U.S. imports:				
Total	7,015	7,513	8,157	16.3
GATT signatories	6,555	6,932	7,501	14.4
Other	460	580	656	42.7
U.S. trade balance:				
Total	4,097	3,880	4,088	(³)
GATT signatories	3,545	3,384	3,529	(³)
Other	552	496	559	(³)
Consumption	42,913	42,700	43,789	2.0
Import market share (percent):				
Total	16.4	17.6	18.6	(³)
GATT signatories	15.3	16.2	17.1	(³)
Other	1.1	1.4	1.5	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures, and totals may not add due to rounding.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will have a small (over 1 percent to 5 percent) beneficial

¹ The following product groups are covered in the discussion of this industry sector: measuring, testing, controlling and analyzing instruments; radio navigational aids, radar, and remote control apparatus; surveying and navigational instruments; drawing and mathematical calculating or measuring instruments, and balances of a sensitivity of 5 centigrams or better; watches; and clocks and timing devices. See app. F, vol. II, for trade tables for this sector and these groups.

effect on the U.S. instrument industry's net trade balance and production, and a negligible positive effect (1 percent or less) on employment and U.S. consumers. The U.S. instrument industry will benefit from the URA provisions liberalizing access to foreign markets, as well as those reducing foreign tariffs.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

The United States is the world's single largest producer of instruments, and the world's leading producer of many of the most advanced-technology instruments.³ U.S. instrument producers supply more than 80 percent of total U.S. consumption, and are believed to account for about a third of world production of instruments.⁴

The strong competitive position of the U.S. instrument industry in domestic and foreign markets is due to a number of factors, including sizeable research and development, technological sophistication, competitive prices, and competent after-sales service. In addition, U.S. instrument manufacturers maintain subsidiaries in virtually all industrialized countries, including Japan, the United Kingdom, Germany, and Canada. U.S. instrument manufacturers maintain manufacturing operations in these and some lesser developed countries to rationalize production globally in order to attain greater economies of scale.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The current U.S. tariffs on instruments range from free to 27.0 percent ad valorem; the bulk of the U.S. tariffs are below 6.0 percent ad valorem. Based on 1993 trade, the average calculated rate for U.S. imports of instruments was 5.2 percent ad valorem. Under the URA this average tariff is to be reduced by 42 percent, to 3.0 percent ad valorem.

The current average calculated tariff rates for leading U.S. trading partners for instruments are about the same as those of the United States. The U.S. tariff reductions for instruments are to be matched by key participants, including the European Union (EU) and South Korea.⁵ Japan has agreed to reduce the tariffs for instruments to zero.

³ U.S. shipment data for 1993 were estimated, based on 1992 data contained in U.S. International Trade Commission (USITC), *U.S. Trade Shifts in Selected Commodity Areas*, 1992 Annual Report, USITC publication 2677, Sept. 1993. Estimated 1993 U.S. shipments of measuring, testing, controlling, and analyzing instruments amounted to \$24.7 billion; radio navigational aid, radar, and remote control apparatus, \$14.7 billion; surveying and navigational instruments, \$7.2 billion; drawing and calculating or measuring instruments, and balances of a sensitivity of 5 centigrams or better, \$580 million; watches, \$220 million; and clocks and timing devices, \$530 million.

⁴ The United States is not a leader in the production of watches and clocks included in this sector. Watches and clocks account for 7 percent of this sector's consumption, and 30 percent of this sector's imports.

⁵ *Report of the Industry Sector Advisory Committee on Electronics and Instrumentation for Trade Policy Matters (ISAC 5) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994, p. 16.

Other Provisions

Several of the URA that are likely to benefit the U.S. instrument industry are those liberalizing access to foreign markets. These include agreements relating to preshipment inspection,⁶ technical barriers to trade,⁷ import licensing,⁸ trade-related intellectual property rights (TRIPs),⁹ and investment measures.¹⁰ Although the U.S. instrument industry generally does not encounter significant tariffs abroad, excessive trade regulations in certain countries are detrimental to the free flow of trade. Consequently, U.S. instrument manufacturers will benefit from the provisions in the URA which will reduce such regulations. In addition, the TRIPs agreement is expected to afford greater protection to U.S. producers, especially those firms producing avionic instruments and other advanced-technology products.

Likely Impact on U.S. Trade

The net effect of the URA on trade likely will be a small increase in the U.S. trade surplus for instruments, primarily as a result of a rise in U.S. exports. The agreement is not expected to have any impact on U.S. trade patterns.

⁶ Agreement on Preshipment Inspection (PSI), Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The Agreement seeks to ensure that PSI activities are carried out in an objective, uniform, and non-discriminatory manner that does not create trade barriers.

⁷ Agreement on Technical Barriers to Trade, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks, among other things, to ensure that technical regulations and standards, and procedures for assessment of conformity with technical regulations and standards, do not create unnecessary obstacles to international trade.

⁸ Agreement on Import Licensing Procedures (ILP), Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The Agreement seeks to ensure, *inter alia*, that import licensing procedures are transparent and applied in a fair and equitable manner, and are not utilized in a manner contrary to the principles and obligations of the GATT 1994.

⁹ Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex IC, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope, and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

¹⁰ Agreement on Trade Related Investment Measures, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to minimize trade restriction and distortion by investment measures not previously covered by the GATT, such as local-content requirements, trade-balancing requirements, foreign exchange limitations, domestic sales requirements, and export performance requirements.

According to the Commission's sectoral model and qualitative staff analysis, the impact of the URA on U.S. imports of instruments likely will be small. Increases in U.S. imports stemming from the URA principally will be due to tariff reductions and growing intra-corporate trade. Slightly lower tariffs on watches and clocks are expected to result in a negligible increase in U.S. imports of these products.

The URA are expected to result in a small increase in U.S. exports of instruments. Those U.S. instrument industries producing advanced-technology products, especially the avionics industry, likely will experience the largest growth in exports. The globalization of the instrument industry probably will further increase intra-corporate trade, and some of the anticipated growth in U.S. exports likely will be due to the increase in such trade. Because most of the subsidiaries of U.S. instrument manufacturers are located in the industrialized countries in Europe, and to a lesser extent in Japan, U.S. exports to these countries likely will increase most.

Likely Impact on U.S. Production, Employment, and Consumers

The anticipated growth in U.S. exports is expected to result in a small increase in U.S. production of instruments and negligible growth in employment in the U.S. instrument industry. Industries that will benefit most from the URA are primary producers of advanced technology instruments. Most of the increase in production is expected to take place in California, Massachusetts, Pennsylvania, Illinois, and Ohio, the

primary states producing instruments. The URA should have no measurable impact on production and employment of the U.S. watch and clock industry, because only a negligible increase in U.S. imports of watches and clocks is anticipated. The URA likely will have only a negligible positive impact on consumers, because slight increases in imports likely will result in negligible declines in prices.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Electronics and Instrumentation for Trade Policy Matters (ISAC 5) supports the URA.¹¹ According to members of ISAC 5,¹² current duty levels serve only to increase the cost of instruments. As a result, ISAC 5 members advocated zero-for-zero duties in this industry segment. Additionally, they also stated that U.S. exporters would benefit from duty elimination because they are globally competitive.

ISAC 5 members also support the intent of the provisions in the URA relating to the liberalization of the world trading system and TRIPs. They contend that these provisions will make foreign markets more accessible to U.S. instrument manufacturers, and better protect the intellectual property of U.S. producers.

¹¹ *ISAC 5 Report*, Jan. 1994, p. 16.

¹² ISAC 5 includes some of the key manufacturers of instrumentation, including Varian Associates, LSI Logic Corp., Rosemount, Honeywell, Hewlett-Packard, and Texas Instruments. In addition, the Electronic Industries Association, which represents many instrument manufacturers, is a member of ISAC 5.

CHAPTER 51

Medical Equipment¹⁾

Table 51-1
Medical equipment: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	165	170	175	6.0
Trade data (million dollars):				
Shipments	20,500	22,200	24,000	17.1
U.S. exports:				
Total	6,206	6,940	7,360	18.6
GATT ² signatories	5,930	6,559	6,944	17.1
Other	275	382	416	51.0
U.S. imports:				
Total	3,762	3,997	4,381	16.4
GATT signatories	3,687	3,901	4,267	15.7
Other	75	97	114	51.3
U.S. trade balance:				
Total	2,443	2,943	2,978	(³)
GATT signatories	2,243	2,658	2,677	(³)
Other	200	285	302	6.0
Consumption	18,056	19,257	21,021	16.4
Import market share (percent):				
Total	20.8	20.8	20.8	(³)
GATT signatories	20.4	20.3	20.3	(³)
Other	0.4	0.5	0.5	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures, and totals may not add due to rounding.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will result in small (over 1 percent to 5 percent) increases in

¹ The following product groups are covered in the discussion of this industry sector: medical, surgical, dental, and veterinary instruments; orthopedic, prosthetic, and surgical appliances; and x-ray and other electromedical apparatus. See app. F, vol. II, for trade tables for this sector and these groups.

the U.S. trade surplus, U.S. production, and U.S. employment in the medical equipment sector. The likely impact of the URA on U.S. consumers will be small but positive. In addition to tariff reductions, the sector likely will be affected by the Technical Barriers to Trade (TBT) Agreement.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

The United States is the largest producer of medical equipment in the world. In 1993, the U.S. sector industry accounted for 47 percent of global production of such equipment³ and supplied approximately 80 percent of the U.S. market. Major global competitors are Europe and Japan. Together, these three countries account for over 95 percent of total world manufacturing of medical equipment. These countries also account for most of the world market for this equipment.

The principal factors affecting competition in the medical equipment industry are technological sophistication, quality, price, and marketing capabilities. The U.S. medical equipment industry leads in each of these factors, except price,⁴ where Japanese companies have a comparative advantage over U.S. and European firms. European manufacturers, particularly German companies, follow just behind U.S. companies but are ahead of Japanese firms in each of the other principal competitive factors.

Because of its strong competitive position, the U.S. industry maintains a trade surplus of almost \$3 billion. Medical equipment markets in GATT-member countries account for over 90 percent of U.S. exports. The largest markets for U.S. exports are Europe, Japan, and Canada; other leading markets are Mexico and Australia.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The current average calculated tariff rate for U.S. medical equipment sector imports is 4.7 percent ad valorem. Tariffs range from 2.1 to 10 percent on sector imports.

Current effective tariff rates for U.S. exports in Europe and Japan are also believed to average about 4.7 percent. In general, tariffs on medical goods in other GATT and non-GATT countries are relatively low, as most countries outside of the United States, Europe, and Japan are significantly dependent on imports from these areas for most of their medical equipment needs.

Under the URA, the United States, the European Union (EU), the European Free-Trade Association (EFTA) countries,⁵ Japan, Canada, and Singapore have agreed to eliminate duties on all medical equipment

³ Estimated by U.S. International Trade Commission (USITC) staff based on official statistics of the U.S. Department of Commerce and on information from the Health Industry Manufacturers Association (HIMA).

⁴ U.S., European, and Japanese industry officials, USITC staff telephone interviews, Feb. 1994.

⁵ Austria, Finland, Iceland, Liechtenstein, Norway, Sweden, and Switzerland.

under a zero-for-zero arrangement.⁶ Reductions are to take place over 5 years, with somewhat less than half occurring in the first year.

Other Provisions

The only other URA expected to have a significant impact on the U.S. industry is the TBT agreement.^{7,8} The medical equipment industry is heavily regulated and its products must meet stringent standards before they may be marketed in most countries.⁹ The 1979 TBT agreement currently in effect requires nondiscriminatory treatment with respect to the testing and certification of products. The revised agreement will cover additional conformity assessment procedures, for which governments will be required to ensure nondiscriminatory and predictable treatment. These include production monitoring, post-market surveillance, and quality system registration.

Likely Impact on U.S. Trade

The net effect of the URA on U.S. trade likely will be a small increase in the U.S. trade surplus for medical equipment. According to the Commission's sectoral model, U.S. imports should increase by a small amount under the URA, largely due to the reduction in U.S. tariffs. Tariff elimination in the EU, EFTA countries, and Japan should enable U.S. exporters to compete more effectively in terms of price. As a result, U.S. firms may gain market share at the expense of foreign producers in those countries.¹¹ This will be reflected by a small increase in U.S. exports. Due to the overall competitive edge U.S. manufacturers hold over foreign manufacturers, U.S. gains in exports

⁶ HIMA, "Medical Technology Industry Strongly Supports GATT Tariff Elimination," *Press Release*, Jan. 31, 1994.

⁷ Agreement on Technical Barriers to Trade, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks, among other things, to ensure that technical regulations and standards, and procedures for assessment of conformity with technical regulations and standards, do not create unnecessary obstacles to international trade.

⁸ Industry official, USITC staff telephone interview, Feb. 25, 1994.

⁹ U.S., European, and Japanese industry officials, USITC staff telephone interviews, Feb. 1994.

¹⁰ Mexico and Canada accounted for 11 percent of U.S. imports and 16 percent of U.S. exports in 1993. Duties for trade with Canada and Mexico will be reduced under the North American Free-Trade Agreement (NAFTA). For more information, see USITC, *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993. U.S. trade with Canada already benefited from significantly reduced tariffs on medical equipment in both countries as a result of the U.S.-Canada Free-Trade Agreement. A significant portion of U.S. imports from Mexico benefited from duty-free treatment under Harmonized Tariff Schedule (HTS) subheading 9802.00.80.

¹¹ U.S. industry officials, USITC staff telephone interviews, Feb. 23-25, 1994.

should exceed the increase in U.S. imports. Manufacturers in all regions of the United States should benefit about equally from the increase in exports.

To the extent that the revised TBT agreement makes regulatory procedures less discriminatory and more predictable for U.S. suppliers of medical equipment to overseas markets, it likely will have a beneficial effect on U.S. exports and the U.S. trade surplus.¹² However, because many elements of the new TBT agreement were already part of the 1979 agreement, any positive effects of the revised agreement on U.S. trade will be negligible.

Trade patterns will be largely unaffected by the URA. There will be a net increase in U.S. imports from countries that are not a party to the zero-for-zero arrangement and non-GATT countries. Such countries will benefit from the reduction in tariffs in the U.S. market while maintaining tariffs against U.S. exports. However, any net increase in imports from those countries likely will be small due to less competitive medical equipment industries in those nations.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model and qualitative staff analysis, production and employment in the medical equipment sector likely will increase a small amount under the URA. Increases in production and employment due to increased exports will offset decreases due to increased imports. The net increase in production and employment likely will benefit all regions of the United States equally.

Elimination of tariffs in Europe and Japan could also motivate U.S. medical equipment firms with production facilities in those regions to relocate some production and employment to the United States.¹³ Reduced tariffs may make it more efficient to service foreign consumers from the United States than from

¹² Industry official, USITC telephone interview, Feb. 24, 1994.

¹³ U.S. industry officials, USITC staff telephone interviews, Feb. 24, 1994.

their domestic markets. However, such relocation likely would be at least partially offset by similar decisions by European companies that have significant manufacturing facilities in the United States. Therefore, any net changes in U.S. production and employment resulting from relocation decisions due to the URA likely would be negligible.

U.S. consumers likely will benefit to a small degree from a negligible decline in the price of domestic products and a small decline in the price of imports as a result of the URA. Consumers also will benefit from a small increase in the supply of available products as competitive producers in Europe and Japan are able to reduce prices and gain market share in the United States due to the elimination of U.S. tariffs.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Electronics and Instrumentation for Trade Policy Matters (ISAC 5) supports the URA market access provisions.¹⁴ Because the United States has the most competitive medical equipment sector in the world, U.S. firms stand to benefit from the URA. In addition, duty elimination likely will result in lower health care costs in the United States.

The Health Industry Manufacturers Association (HIMA) strongly supports the URA.¹⁵ The agreement among the United States, the EU, the EFTA countries, Japan, Canada, and Singapore to eliminate tariffs for almost all medical equipment should benefit all of these countries by increasing production and reducing health care costs. HIMA estimates that the URA will increase U.S. production by \$200 million to \$300 million and create up to 3,000 jobs. Because nontariff barriers are a negligible factor in the medical equipment sector, HIMA estimates that almost all of the impact of the URA will be from reduced tariffs.

¹⁴ *Report of the Industry Sector Advisory Committee on Electronics and Instrumentation for Trade Policy Matters (ISAC 5) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994, p. 17. USITC staff interviews with officials from the medical equipment industry (Feb. 1994) indicated their agreement with the ISAC position.

¹⁵ HIMA, *Press Release*, Jan. 31, 1994.

CHAPTER 52

Photographic and Optical Equipment and Materials¹

Table 52-1
Photographic and optical equipment and materials: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	337	335	330	-2.1
Trade data (million dollars):				
Shipments	20,430	20,200	21,100	3.3
U.S. exports:				
Total	3,772	3,901	3,825	1.4
GATT ² signatories	3,576	3,741	3,669	2.6
Other	195	161	156	-20.0
U.S. imports:				
Total	5,216	5,535	6,006	15.2
GATT signatories	4,792	5,070	5,410	12.9
Other	424	465	596	40.9
U.S. trade balance:				
Total	-1,444	-1,634	-2,181	(³)
GATT signatories	-1,216	-1,329	-1,741	(³)
Other	-228	-304	-440	(³)
Consumption	21,874	21,834	23,281	6.4
Import market share (percent):				
Total	23.8	25.3	25.8	(³)
GATT signatories	21.9	23.2	23.2	(³)
Other	1.9	2.1	2.6	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures, and totals may not add due to rounding.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The overall effect of the Uruguay Round Agreements (URA) on the photographic and optical

¹ The following product groups are covered in the discussion of this industry sector: photographic supplies; exposed photographic plates, film, and paper; optical goods, including ophthalmic goods; and photographic cameras and equipment. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely

sector likely will be a small (over 1 percent to 5 percent) increase in U.S. trade and a negligible (1 percent or less) improvement in the U.S. trade balance. There likely will be a negligible but positive effect on U.S. production and employment, and a small positive effect on U.S. consumers. In addition to tariff reductions, agreements on investments, customs valuation, rules of origin, licensing, dispute settlement, and subsidies should benefit this sector.

²—Continued

impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

The United States is among the largest producers of photographic and optical equipment in the world. In 1993, the U.S. industry accounted for about one third of world production of such equipment. Photographic supplies, such as photographic film and chemicals, accounted for almost 50 percent of total U.S. sector shipments, with other photographic equipment accounting for an additional 30 percent. The U.S. industry supplied about 75 percent of the U.S. market for photographic and optical equipment. Major foreign competitors are located in Europe and Japan.

The larger firms in the U.S. photographic and optical equipment sector are world leaders in such products as film, photographic developing chemistry, instant print cameras, and industrial lasers. High levels of research and development are needed to maintain a prominent place in the market for the products covered in this sector, and U.S. companies spend more than the average for industry. In addition, a major U.S. firm holds the patents for instant print cameras and is the exclusive supplier of this type of camera in many of the GATT nations. The largest markets for U.S. exports are the European Union (EU), Japan, Canada, and Mexico.³

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The current average calculated duty rate on U.S. imports of photographic and optical equipment is 4.7 percent ad valorem. Tariff rates on U.S. imports of the products in this sector range from zero to 20 percent ad valorem (telescopic sights for rifles and their parts). In general, U.S. tariff rates on photographic equipment and supplies are lower than the rates for optical goods. Under the URA, the United States has offered to eliminate or reduce duties on most of these imports, reducing the average calculated tariff rate to 2.2 percent ad valorem.

The current average calculated tariff on U.S. exports to GATT countries is estimated to range from 4.6 percent to 5.7 percent ad valorem. The effective tariff rate is to be reduced by half under the URA. Duty rates faced by U.S. exports to the EU generally range from 5 to 10 percent. U.S. exports to Japan face duty rates ranging from zero to 8 percent, with most duties in the 4 to 6 percent range. The estimated average reduction in the duty rates faced by U.S. exports to both the EU and Japan is to be 3.2 percentage points.

³ Canada and Mexico account for 20 percent of U.S. exports. Duties for trade with Canada and Mexico will be reduced under the North American Free-Trade Agreement (NAFTA). For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

Other Provisions

URA provisions that speed and simplify international trade and investment are important to this sector. Many firms need to move intermediate and finished goods from production sites in one country to production and distribution sites in another. The ability to transfer goods between countries is often limited by the lack of transparency and uniformity in the administration of trade and investment rules. The URA's provisions on investment,⁴ customs valuation,⁵ rules of origin,⁶ licensing,⁷ subsidies and countervailing measures,⁸ and dispute settlement⁹ may improve transparency and uniformity.

⁴ Agreement on Trade Related Investment Measures, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to minimize trade restriction and distortion by investment measures not previously covered by the GATT, such as local-content requirements, trade-balancing requirements, foreign exchange limitations, domestic sales requirements, and export performance requirements.

⁵ Agreement on Implementation of Article VII of the General Agreement on Tariffs and Trade 1994, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide greater uniformity and certainty in the implementation of rules relating to customs valuation set forth in article VII of the GATT 1994 by, *inter alia*, defining acceptable and prohibited valuation practices, increasing access to information by customs administrations, and providing for dispute settlement.

⁶ Agreement on Rules of Origin, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement sets forth a timetable under which GATT rules of origin will be developed and implemented. The agreement establishes a working committee to consult with the Customs Cooperation Council, a non-GATT entity, in developing GATT rules of origin. The agreement is intended to ensure that such rules are clear and are applied in an impartial, transparent, predictable, consistent, and neutral manner.

⁷ Agreement on Import Licensing Procedures (ILP), Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The Agreement seeks to ensure, *inter alia*, that import licensing procedures are transparent and applied in a fair and equitable manner, and are not utilized in a manner contrary to the principles and obligations of the GATT 1994.

⁸ Agreement on Subsidies and Countervailing Measures, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement defines prohibited, actionable, and non-actionable subsidies; and sets forth rules for imposition of countervailing measures in accordance with article VI of the GATT 1994 with respect to goods benefiting from prohibited or actionable subsidies.

⁹ Understanding on Rules and Procedures Governing the Settlement of Disputes, Annex 2, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The rules and procedures in the Understanding apply to disputes brought pursuant to the consultation and dispute settlement rules and procedures of the 14 agreements relating to trade in goods (including the GATT 1994), the General Agreement on Trade in Services, the Agreement on Trade-Related Aspects of Intellectual Property Rights, and, as

Likely Impact on U.S. Trade

The net effect of the URA on U.S. trade for the photographic and optical sector likely will be a small positive increase in both exports and imports, leading to a negligible improvement in the trade balance. Most of the large multinational firms in the photographic and optical sector have rationalized their production on a global basis and are not likely to change the location of production as a result of duty reductions.

According to the Commission's sectoral model and qualitative staff analysis, U.S. sector imports likely will experience a small increase as a result of the URA, largely due to foreign tariff reductions. The general pattern of imports is not expected to change.

U.S. sector exports likely will experience a small increase as a result of the URA. Because U.S. firms already have operations in Canada and the EU and likely will supply these markets from local production, changes in export patterns after the duty reductions occur are expected to be small.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model and qualitative staff analysis, the likely impact of the URA on U.S. production and employment will be positive but negligible as increases in production and employment due to increased exports will offset decreases due to increased imports.

⁹—Continued
appropriate, the Plurilateral Trade Agreements in Annex 4, as well as consultations and the settlement of disputes concerning the rights and obligations under the provisions of the Agreement Establishing the World Trade Organization.

The impact of the URA on U.S. consumers of these products will likely be small, due to a negligible decrease in the price of U.S. products and a small fall in the prices of imports. Increased imports may increase the variety of available products, contributing to the small gain by U.S. consumers.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Electronics and Instrumentation for Trade Policy Matters (ISAC 5) supports the URA, particularly the provisions regarding market access and strengthened disciplines to deal with trade distorting measures.¹⁰ The Committee also supports the expansion of URA coverage to include such issues as intellectual property rights, investment, and services.

U.S. industry feels that duty reductions are a positive step that will allow U.S. firms to compete more effectively with their principal foreign competitors in other GATT markets. U.S. multinational firms also expect to benefit from duty reductions as they ship products from one country to another during the manufacturing process. However, within the sector there is concern that U.S. trade laws should remain effective against unfair practices by foreign competitors. Preserving the full effectiveness of U.S. trade laws in the implementing legislation for the URA was mentioned as a primary concern by one U.S. film manufacturer."

¹⁰ *Report of the Industry Sector Advisory Committee on Electronics and Instrumentation for Trade Policy Matters (ISAC 5) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994, pp. 9-11.

¹¹ Industry official, USITC staff telephone interview, Mar. 1994.

PART VIII
LIKELY IMPACT OF THE URA ON U.S.
MISCELLANEOUS MANUFACTURES
SECTORS

Summary of the Likely Impact of the URA on U.S. Miscellaneous Manufactures Sectors

- U.S. miscellaneous manufactures sectors covered in detail in this report include silverware, flatware, and jewelry; recreational goods; luggage, handbags, and flat goods; furniture and lamps; and miscellaneous manufactured articles.
- Although U.S. production of miscellaneous manufactures generally accounts for a significant portion of U.S. market share, U.S. producers' world market share is generally small. Production of most miscellaneous manufactures tends to be labor-intensive and import penetration is generally higher than average for these goods. The United States is a major market for miscellaneous manufactures from both GATT and non-GATT countries.
- Tariffs in the miscellaneous manufactures sectors vary widely, ranging from free to 21 percent ad. However, many sector products enter the United States subject to zero or reduced duties under various trade agreements, including the North American Free-Trade Agreement, the Caribbean Basin Economic Recovery Act, and the Generalized System of Preferences.
- Tariff reduction offers on sector products under the Uruguay Round Agreements (URA) ranged from 10 to 73 percent. Tariffs on toys and furniture are to be eliminated under zero-for-zero agreements. Because U.S. tariff reductions will be extended on a most-favored-nation basis, non-GATT countries, such as China and Taiwan, will also benefit from these reductions.
- Although tariff cuts are generally the most significant URA provision affecting the U.S. miscellaneous manufactures sector, other provisions may have significant effects on certain sectors. More comprehensive protection of copyrights and trademarks under the agreement on trade-related intellectual property rights are expected to increase export opportunities for U.S. products in markets where such protection has been lax. If China and Taiwan become members of GATT, the elimination of the Multifiber Arrangement may lead to a significant increase in imports of certain luggage, handbags, and flat goods, increasing the negative effects for this sector.
- The effect of the URA on the trade balance in most miscellaneous manufactures sectors of the U.S. economy likely will generally be small (over 1 percent to 5 percent) and negative, with recreational goods experiencing a modest decline (over 5 percent to 15 percent). As a result, there is likely to be a negligible negative net effect on U.S. production and employment in most sectors. For the sector comprised of miscellaneous manufactured articles, a negligible improvement (1 percent or less) in the trade balance is expected, with similar gains in production and employment. Lower prices and the availability of a somewhat greater variety of goods in the U.S. market, are likely to benefit consumers of recreational goods and luggage, handbags and flat goods by a small amount; consumers of silverware, flatware, and jewelry, furniture and lamps, and miscellaneous manufactured articles are expected to benefit negligibly.

CHAPTER 53

Silverware, Flatware, and Jewelry¹

Table 53-1
Silverware, flatware and jewelry: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	59	57	57	-3.4
Trade data (million dollars):				
Shipments	5,280	5,373	5,632	6.7
U.S. exports:				
Total	697	771	635	-8.9
GATT ² signatories	640	710	589	-7.9
Other	57	61	46	-20.3
U.S. imports:				
Total	3,245	3,607	4,095	26.2
GATT signatories	2,927	3,251	3,723	27.2
Other	318	356	372	17.0
U.S. trade balance:				
Total	-2,548	-2,836	-3,460	(³)
GATT signatories	-2,287	-2,541	-3,134	(³)
Other	-261	-295	-326	(³)
Consumption	7,828	8,209	9,092	16.1
Import market share (percent):				
Total	41.5	43.9	45.0	(³)
GATT signatories	37.4	39.6	40.9	(³)
Other	4.1	4.3	4.1	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) are expected to have a small negative effect (over

I The following product groups are covered in the discussion of this industry sector: silverware and certain other articles of precious metal or metal clad with precious metal; table flatware and related products; precious jewelry and related articles; and costume jewelry and related articles. See app. F, vol. II, for the trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's

1 percent to 5 percent) on the U.S. trade balance, a negligible negative net effect (1 percent or less) on U.S. production and employment, and a negligible positive effect on consumers of products in the silverware, flatware, and jewelry sector. These changes are due to relatively small reductions in U.S. and foreign tariffs, which are the primary URA provisions affecting this sector.

²—Continued

sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

U.S. shipments by the silverware, flatware,³ and jewelry sector account for approximately 15 percent of world output and supply slightly more than one-half of the U.S. market. Precious jewelry represents the majority of both U.S. production and trade in these products.

Sector industries are considered mature and are not characterized by high degrees of technological sophistication in manufacturing or by significant levels of research and development. U.S. producers of jewelry are generally specialized and usually purchase raw materials, parts, and services from suppliers. Domestic producers of jewelry maintain a competitive advantage over most imports in the styling, overall availability and variety of product, shorter delivery time, and in historic supplier relationships. The number of U.S. producers of silverware and flatware is limited, and these firms compete effectively on the basis of brand name recognition, national advertising, quality, and design. Firms producing jewelry, silverware, and flatware are concentrated in New York, Rhode Island, Massachusetts, and California.

The primary world suppliers of jewelry, silverware, and flatware include Italy, the European Union (EU), Hong Kong, Taiwan, and Korea. Italy accounts for nearly half of world production of these products. The United States and the EU are the world's major markets and account for approximately 40 and 30 percent, respectively, of world imports.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated U.S. tariff level for the silverware, flatware, and jewelry sector is currently 7.5 percent ad valorem. The United States has agreed to reduce the tariff by 1.1 percentage points, or 15 percent, resulting in a trade-weighted average tariff level of 6.4 percent ad valorem.

The average calculated tariff reduction by principal U.S. GATT trading partners is to be 0.8 percentage point for the silverware, flatware, and jewelry sector, ranging from 0.03 percentage point for costume jewelry to 3.1 percentage points for silverware. Current ad valorem rates of duty on imports of these products entering the EU range between 3 and 17 percent, and rates on imports entering Japan range between 3.7 and 12.5 percent.

Other Provisions

No other URA provisions are expected to have a significant impact on this sector.

³ Flatware utensils are usually cast in a single piece. Silverware includes flatware and hollow ware of silver or of a silver-plated base metal.

Likely Impact on U.S. Trade

The URA likely will have a small negative net effect on the U.S. trade balance in the silverware, flatware, and jewelry sector, according to the Commission's sectoral model. Although the percentage increase in exports is expected to exceed the percentage increase in imports, imports are growing from a much larger base. Therefore, the value of the increase in sector imports likely will be larger than that of exports. The impact of the URA tariff reductions on the level of U.S. imports is likely to be limited somewhat, since several major U.S. suppliers (Israel, India, and the Dominican Republic) currently receive preferential tariff treatment.⁴ Together these countries accounted for 14 percent of total U.S. imports of sector products in 1993.

U.S. imports of flatware and jewelry likely will increase by small amounts because of relatively small U.S. tariff cuts. U.S. imports of silverware will increase by a modest amount (over 5 percent to 15 percent), reflecting larger U.S. tariff reductions for silverware as compared with reductions for other products in this sector. However, the impact of the URA reductions on the level of silverware imports may be mitigated because the leading U.S. suppliers, Argentina and Chile (60 percent of U.S. imports in 1993), currently benefit from Generalized System of Preferences (GSP) treatment.

Trade patterns are not expected to change significantly because of the URA. Italy, which currently provides about one-third of sector imports, will likely be the principal beneficiary of the URA tariff reductions. Precious metal jewelry makes up the bulk of U.S. imports from Italy, and tariff reductions will enhance the competitive position of these products, which are generally considered to be very high-quality.

U.S. exports of all sector products likely will increase by small amounts because of the URA. Principal GATT markets for increased U.S. exports of these products are Japan, the EU, and Switzerland. Canada and Mexico accounted for 21 percent of U.S. exports in 1993. Duties for trade with Canada and Mexico will be reduced under the North American Free-Trade Agreement (NAFTA).⁵

⁴ U.S. imports of these products from Israel are eligible for duty-free treatment under the U.S.-Israel Free-Trade Area Implementation Act and the Generalized System of Preferences (GSP). Most imports from India are eligible for duty-free treatment under the GSP. Imports from the Dominican Republic receive duty-free treatment under the Caribbean Basin Economic Recovery Act and the GSP. Qualifying imports from the Dominican Republic are also subject to reduced duties under Harmonized Tariff Schedule (HTS) provision 9802.00.80.

⁵ For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, the URA likely will have a negligible negative effect on U.S. production and employment in this sector. Increases in production and employment due to increased exports likely will be offset by decreases due to increased imports.

U.S. consumers of these products are likely to experience a negligible gain as a result of the URA, due to a negligible decrease in the prices of U.S. products and imports. As a result of increased imports, the variety of competitively-priced products is likely to increase.

U.S. Industry Positions on the URA

The Manufacturing Jewelers and Silversmiths of America favors retention of U.S. duties on both precious and costume jewelry and gradual reductions in foreign tariff levels.^a Oneida Ltd., a major producer

^a Representatives of U.S. jewelry industry, USITC staff telephone interviews, Mar. 7 and 17, 1994.

of sector products, favors retention of U.S. duties on silverware and flatware and reductions in foreign tariff levels.⁷ The Industry Sector Advisory Committee on Consumer Goods (ISAC 4) conditionally supports the URA, indicating that major Southeast Asian and Latin American markets should become more open to a broader range of consumer goods as a result of these agreements.

⁷ Oneida Ltd. (Oneida, NY), letter to USITC staff, Dec. 1993.

⁸ *Report of the Industry Sector and Advisory Committees (ISAC 4) on Consumer Goods for Trade Policy Matters on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

CHAPTER 54

Recreational Goods¹

Table 54-1
Recreational goods: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	143	152	152	6.3
Trade data (million dollars):				
Shipments	12,709	12,528	14,001	10.2
U.S. exports:				
Total	2,527	2,911	3,220	27.4
GATT ² signatories	2,400	2,739	2,986	24.4
Other	127	172	235	84.6
U.S. imports:				
Total	9,230	11,128	12,100	31.1
GATT signatories	4,797	5,530	6,216	29.6
Other	4,434	5,598	5,884	32.7
U.S. trade balance:				
Total	-6,703	-8,217	-8,879	(³)
GATT signatories	-2,398	-2,791	-3,230	(³)
Other	-4,307	-5,426	-5,649	(³)
Consumption	19,412	20,745	22,881	17.9
Import market share (percent):				
Total	47.6	53.6	52.9	(³)
GATT signatories	24.7	26.7	27.2	(³)
Other	22.8	27.0	25.7	(³)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will result in a modest (over 5 percent to 15 percent) increase in both U.S. exports and imports, resulting in

¹ The following product groups are covered in the discussion of this industry sector: dolls, toys, games, fairground amusements, sporting goods, bicycles, and musical instruments. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely

a modest decline in net trade in the recreational goods sector, relative to current trade. The URA are expected to have a negligible (1 percent or less) negative effect on production and employment and a small (over 1 percent to 5 percent) benefit to U.S. consumers due to reduced prices. In addition to tariff reductions, the agreement on trade-related intellectual property rights (TRIPs) is expected to significantly affect this sector.

²—Continued
impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

The United States is a major consumer of recreational goods, much of them supplied by imports. Imports accounted for nearly 53 percent of U.S. consumption in 1993. U.S. production of recreational goods is primarily for domestic consumption. In 1993, less than 23 percent of U.S. production was exported.

Production of recreational goods is generally labor-intensive, leading many U.S. producers to move their manufacturing and assembly facilities off-shore, mainly to China and Taiwan, to take advantage of low-cost foreign labor. The industrial activity of many U.S. firms in this sector is largely limited to product development, design, engineering, quality control, packaging, and marketing.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated U.S. tariff rate for recreational goods was 5.9 percent ad valorem in 1993. Under the URA, average U.S. tariff rates for the sector are to be reduced by 4.3 percentage points to 1.6 percent ad valorem. During the Uruguay Round negotiations, the United States proposed adoption of reciprocal zero tariff rates for dolls, toys, and games.⁴ This zero-for-zero arrangement was accepted by other GATT member countries. U.S. tariff rates on musical instruments, bicycles, and sporting goods were reduced by only 1 to 2 percentage points.

For the sector as a whole, foreign tariff rates for U.S. exports will be reduced under the URA by 1 to 4 percentage points in Japan, 2 to 3 percentage points in the European Union (EU), and 15 to 18 percentage points in South Korea. Nearly 93 percent of U.S. recreational goods are exported to GATT-member countries, with Canada, Japan, and Mexico being the three largest markets.⁵

³ Major industry segments in which U.S. producers have shifted a significant portion of production assembly to low-labor-cost countries in Asia include toys, dolls, video games, tennis rackets, billiard equipment, baseballs, golf clubs, roller skates, rowing machines, bicycles, and fishing rods.

⁴ U.S. domestic production of these goods is relatively small, with the majority of domestic consumption supplied by non-GATT parties, China and Taiwan. Dolls, toys, and games accounted for 66 percent of total sector imports in 1993 and 46 percent of sector exports.

⁵ Duties for trade with Canada and Mexico will be reduced under the North American Free-Trade Agreement (NAFTA). For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

Other Provisions

The U.S. recreational goods sector likely will be positively impacted by the TRIPs agreement.⁶ The agreement provides standards for the protection of copyrights, patents, trademarks, semiconductor chip layout designs, and trade secrets, which are important competitive factors for many items in this sector. Exports of sporting goods, toys, and games are expected to increase to countries where enforcement of intellectual property rights has been lax.

Likely Impact on U.S. Trade

According to the Commission's sectoral model, the URA likely will have a modest net negative effect on U.S. trade in recreational goods. Modest increases in U.S. imports and exports will result in a greater increase in imports than exports, since imports are growing from a much larger base. Currently, over 48 percent of total sector imports are produced in China and Taiwan, which are not GATT members.⁷

U.S. export markets are dominated by GATT-signatory countries and these trade patterns are not expected to change under the URA. However, the significance of Canadian and Mexican markets for sector exports (Canada and Mexico accounted for over one-quarter of total sector exports in 1993) may moderate the effect of GATT tariff reductions on the level of U.S. exports.

Likely Impact on U.S. Production, Employment, and Consumers

The URA likely will have a negligible negative effect on U.S. sector production and employment, according to the Commission's sectoral model. These industries are relatively labor-intensive and many U.S. manufacturers have moved production off-shore to

⁶ Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex IC, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope, and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

⁷ Taiwan formally applied for accession to the GATT in 1990. A working party was established in Sept. 1992 to consider Taiwan's membership. The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

take advantage of lower cost foreign labor. Any increase in production and employment resulting from increased U.S. exports is expected to be offset by losses associated with increased U.S. imports.

The impact of the URA on U.S. consumers of recreational goods will likely be beneficial, although small, due to a negligible decrease in the price of U.S. products and a small reduction in prices of GATT and non-GATT imports as competition in the U.S. market increases. Increased imports may increase the variety of available products, contributing to the small gain by U.S. consumers.

U.S. Industry Positions on the URA

The positions of sector representatives concerning the URA are summarized by the Industry Sector Advisory Committee on Consumer Goods (ISAC 4).⁸

⁸ *Report of the Industry Sector and Advisory Committee (ISAC 4) on Consumer Goods for Trade Policy Matters on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

ISAC 4 expects the successful completion of the URA to enhance international trade in these product areas. Mattel, one of the world's largest toy companies, also strongly supports the URA, noting that the agreements are likely to have an enormous positive impact on the U.S. toy industry.⁹

U.S. doll producers are opposed to the URA due to the potential deleterious impact of tariff reductions on domestic manufacturers.¹⁰ One labor union also indicated opposition to ratification of the URA because of the likely elimination of jobs associated with increased imports due to U.S. tariff reductions.¹¹

⁹ Mattel, Inc. (El Segundo, CA), official submission to USITC, May 2, 1994.

¹⁰ Alexander Doll Company, Inc. (New York, NY), official submission to USITC, May 5, 1994; Eugene Doll Co., Inc. (Brooklyn, NY), official submission to USITC, Apr. 26, 1994; and Goldberger Doll Manufacturing Co., Inc. (Brooklyn, NY), official submission to USITC, Apr. 21, 1994.

¹¹ II Amalgamated, Industrial and Toy and Novelty Workers of America, official submission to the USITC, May 20, 1994.

CHAPTER 55

Luggage, Handbags, and Flat Goods¹

Table 55-1
Luggage, handbags, and flat goods: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	23	21	21	-8.7
Trade data (million dollars):				
Shipments	1,836	1,810	1,760	-4.1
U.S. exports:				
Total	159	194	199	25.4
GATT ² signatories	143	176	180	25.6
Other	16	18	19	22.8
U.S. imports:				
Total	2,281	2,437	2,584	13.3
GATT signatories	1,010	1,014	1,041	3.0
Other	1,271	1,423	1,544	21.5
U.S. trade balance:				
Total	-2,122	-2,243	-2,385	(³)
GATT signatories	-867	-838	-861	(³)
Other	-1,255	-1,405	-1,525	(³)
Consumption	3,958	4,053	4,145	4.7
Import market share (percent):				
Total	57.6	60.1	62.3	(³)
GATT signatories	25.5	25.0	25.1	(³)
Other	32.1	35.1	37.2	(³)

¹ Employment and shipment data for 1992 and 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA) are expected to have a small negative effect (over

¹ The following product group is covered in the discussion of this industry sector: luggage, handbags, and flat goods. See app. F, vol. II, for the trade table for this sector.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely

1 percent to 5 percent) on the net trade balance and a negligible negative net effect (1 percent or less) on U.S. production and U.S. employment in the luggage, handbags, and flat goods sector. The impact on consumers is likely to be, positive but small. These effects will be minimal because U.S. and foreign tariff reductions are relatively small and no other agreements, except the phaseout of the Multifiber

²—Continued

impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

Arrangement (MFA) under the Agreement on Textiles and Clothing,³ are known to affect these products in a significant way. The phaseout of the MFA likely will not have a significant effect until China and Taiwan become members of the GATT.⁴

The U.S. share of world exports and production in luggage, handbags, and flat goods is believed to be minor. However, the United States is a major market for both GATT and non-GATT signatories. U.S. producers' shipments accounted for an estimated 38 percent of the U.S. market in 1993.

These are labor-intensive, mature industries not noted either for technological sophistication or for high levels of research and development. Establishments producing luggage, handbags, and flat goods are concentrated in New York, California, New Jersey, Florida, and Massachusetts. The largest U.S. producer is in Colorado.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated U.S. tariff level on luggage, handbags, and flat goods of 14.4 percent ad valorem will be reduced by 1.4 percentage points, or by 9.7 percent. The resulting average calculated tariff level is to be a moderately high 13.0 percent ad valorem.

Current rates of duty on imports of these articles entering Japan, the principal U.S. market, range between 4.0 and 20.0 percent ad valorem. Rates for imports entering the European Union (EU) range between 5.1 and 12.0 percent ad valorem. The average calculated tariff reduction for the principal U.S. GATT export market countries, excluding Canada, Mexico, and Hong Kong,⁵ is to be 0.4 percentage point.

³ Agreement on Textiles and Clothing, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement provides for the phaseout of import quotas on textiles and clothing, and full integration of the sector into the GATT 1994 during a 10-year transition period. The agreement is discussed in detail in ch. 25.

⁴ Taiwan formally applied for accession to the GATT in 1990. A working party was established in Sept. 1992 to consider Taiwan's membership. The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

⁵ These products already receive duty-free treatment when entering Hong Kong. They are, or will be, duty-free when entering Canada and Mexico under the North American Free-Trade Agreement (NAFTA). For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

However, Japan's bound offers on many Harmonized Tariff Schedule (HTS) subheadings are higher than the current unbound tariff level, resulting in no overall reduction.

Other Provisions

The elimination of the MFA could have a potentially important effect on the products in this sector. Certain U.S. imports of textile luggage, flat goods, and handbags from China and Taiwan currently are subject to quotas under the MFA. However, China and Taiwan are not GATT parties, and, consequently, probably will not receive the benefits of the elimination of the MFA until each becomes a member of GATT.⁶

Likely Impact on U.S. Trade

The URA likely will have a small negative net effect on U.S. trade in luggage, handbags, and flat goods. According to the Commission's sectoral model, imports will increase slightly more than exports. Trade patterns of both imports and exports are not expected to change.

U.S. imports of luggage, handbags, and flat goods likely will show a small increase under the URA because the average calculated tariff reduction of 1.4 percentage points is small.

U.S. exports of these products will increase by only a negligible amount because of the URA. The average calculated foreign tariff reduction offered by the principal sector market countries is limited, largely because a large number of offers made by Japan established bound tariffs at levels higher than the bound rates currently applied. In addition, the potential impact of the URA on U.S. exports will be diminished because Canada, Mexico, and Hong Kong are among the principal U.S. markets, together accounting for 31 percent of total exports in 1993, and U.S. exports to these countries already benefit from reduced or free duties. Given that imports will increase from a much larger base, negligible increases in exports are likely to be more than offset by small amounts of increased imports, resulting in a small negative net change in total trade.

⁶ President Clinton has stated that China, the leading textile supplier, will not be eligible for quota liberalization until it becomes a member of GATT. The administration so far has not stated its policy for other non-GATT countries with which the United States had quota agreements, such as Taiwan, the fourth largest source. President, "Memorandum of December 15, 1993—Trade Agreements Resulting From the Uruguay Round of Multilateral Trade Negotiations," 58 *Federal Register* 67274, Dec. 20, 1993.

Likely Impact on U.S. Production, Employment, and Consumers

The URA likely will lead to a negligible negative net effect on U.S. production and employment in the luggage, handbags, and flat goods sector. Decreases in production and employment due to increased imports will be somewhat offset by increases caused by increased exports. No regional impact on employment or production is expected because of the URA.

The impact of the URA on U.S. consumers of these products is likely to be small and positive, due to the negligible decrease in the price of U.S. products and a small fall in the prices of GATT and non-GATT imports. Increased imports may increase the variety of available products, contributing to the small gain by U.S. consumers.

U.S. Industry Positions on the URA

According to the Industry Sector Advisory Committee on Footwear, Leather, and Leather Products (ISAC 8), which covers the luggage and flat goods industries, the products of these two industries are extremely import-sensitive.⁷ Consequently, these two

⁷ *Report of the Industry Sector Advisory (ISAC 8) on Footwear, Leather and Leather Products on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 11, 1994. USITC staff interviews with officials of the luggage and flat goods industries (Apr. 1994) indicated their agreement with the ISAC position.

industries are satisfied with the limited number of small reductions made in duties. According to the ISAC report, "since China was not a party to these negotiations, the inclination of U.S. negotiators was to avoid making tariff cuts on products if China would be the main beneficiary to prevent the 'free rider' problem." The report also stated that the elimination of the MFA could potentially have a major effect on this sector. Separately, an industry source stated that, even with MFA quotas, growth of U.S. imports has occurred, but that quotas have provided for orderly growth.⁸ The report urged the United States to use its discretion in timing the elimination of quotas, removing those on the least-sensitive products first and those on the most-sensitive products last. The same industry source stated that, when these countries do have their quotas eliminated, the timing and duration of the phaseout periods will be very important determinants of the impact on U.S. producers and employees. Thus, the ISAC report states, quotas should be maintained as long as possible on sector products to minimize the potential impact of elimination of the MFA, which "was a major concession to developing countries in the URA." In light of this concession, the report's authors expressed disappointment that "the link to U.S. market access in developing countries has not been realized."

⁸ Official of the Economic Consulting Services, Inc., for the Luggage & Leather Goods Manufacturers Association, Inc., USITC staff telephone interview, Mar. 10, 1994.

CHAPTER 56

Furniture and Lamps¹

Table 56-1
Furniture and lamps: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	566	561	568	10.4
Trade data (million dollars):				
U.S. exports:				
Total	2,629	3,149	3,414	29.8
GATT ² signatories	2,399	2,876	3,085	28.6
Other	230	273	329	42.7
U.S. imports:				
Total	6,276	7,054	8,011	27.6
GATT signatories	4,117	4,506	5,091	23.7
Other	2,159	2,548	2,920	35.2
U.S. trade balance:				
Total	-3,647	-3,905	-4,597	(³)
GATT signatories	-1,718	-1,630	-2,006	(^a)
Other	-1,929	-2,275	-2,591	(^a)
Consumption	56,947	59,555	63,097	10.8
Import market share (percent):				
Total	11.0	11.8	12.7	(^a)
GATT signatories	7.2	7.6	8.1	(^a)
Other	3.8	4.3	4.6	(^a)

¹ Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

² General Agreement on Tariffs and Trade (GATT).

³ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis² and U.S. Competitive Position

The net effect of the Uruguay Round Agreements (URA) on the furniture and lamps sector likely will be

¹ The following product groups are covered in the discussion of this industry sector: furniture and selected furnishings (including articles of bedding); and lamps and lighting fittings. The principal segments of the U.S. furniture industry are household furniture, office furniture, and motor vehicle seats. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely

a small increase (over 1 percent to 5 percent) in the trade deficit and a negligible decline (1 percent or less) in both the value of U.S. producers' shipments and the level of employment. U.S. consumers of these products are likely to benefit from a negligible decrease in price. The effect of tariff reductions under the URA will be moderated by the high proportion of U.S. imports from North American Free-Trade Agreement (NAFTA) partners Canada and Mexico.

²—Continued

impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

No other URA provisions are expected to significantly affect this sector.

U.S. producers' shipments of furniture and lamps accounted for an estimated 20 and 30 percent, respectively, of world production in 1993. The United States is the world's largest importer of furniture and lamps, although U.S. producers' shipments accounted for an estimated 87 percent of the U.S. market in 1993. International trade in furniture is hindered by high transportation costs.

Industrialized countries (principally Canada, the European Union (EU), and Japan) have methods of manufacture and labor costs that are comparable to those in the United States. Because of proximity, Canada is the largest U.S. trading partner in furniture. U.S. producers of household furniture have access to competitively-priced lumber. U.S. producers of office furniture are among the world leaders in manufacturing efficiency, design, and service. U.S. manufacturers of motor vehicle seats, and their counterparts in the EU and Japan, rely heavily on production-sharing operations. Major U.S. lamp firms are able to profit from economies of scale and accumulate the financial resources to generate new products requiring significant investment in research, design, engineering, and manufacturing processes. A major part of the Canadian production of lamps is accounted for by subsidiaries of U.S. companies.

Producers in Asian countries, such as China, Malaysia, Thailand, Indonesia, and the Philippines, primarily export labor-intensive rattan furniture and ready-to-assemble (RTA) furniture. Taiwan, a non-GATT producer, has invested in the most advanced and sophisticated wood-working machinery available. This strategy has helped producers in Taiwan to offset rising labor costs and to maintain a price advantage over U.S. RTA furniture producers. Mexican producers have a particular advantage in the U.S. market for upholstered furniture and highly crafted wood furniture. Mexican quality is comparable to that of some Italian producers of leather upholstered furniture.

European lamp producers are ranked among the world leaders in specialized detail work, state of the art products, and standard residential and commercial floor and table lamps geared to the high-end of the U.S. market. Developing countries, particularly China, Taiwan, and, to a lesser extent, Mexico, are becoming increasingly efficient manufacturers of more standard products, such as table, desk, bedside, and floor lamps, residential chandeliers, and Christmas tree lights.

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated U.S. tariff for the furniture and lamps sector was 4.6 percent ad valorem in 1993.

The average offered U.S. tariff reduction is 2.4 percentage points, to 2.2 percent ad valorem. Current U.S. tariffs range from 2.5 to 7.5 percent for furniture, and from 3.7 to 15 percent for lamps and bedding articles. U.S. and foreign tariffs on furniture were negotiated to zero under a zero-for-zero agreement. U.S. tariffs on lamps and bedding articles are to be reduced to a range of 3 to 12.8 percent under the URA.

EU tariff rates on furniture currently range between 4.4 and 5.6 percent. The tariff on articles of bedding is 7 percent. EU tariff rates on lamps range between 5 and 10 percent. Under the URA, EU tariffs on furniture are to be reduced to zero, tariffs on articles of bedding will range from 2 to 3 percent, and those on lamps will be 4 percent. Japanese tariff rates on the furniture and lamps sector currently range between 4.8 and 5.8 percent. Japanese tariffs on furniture and lamps are to be reduced to zero under the URA. The tariff on articles of bedding is to be 1.8 percent.

Other Provisions

No other URA provisions are expected to have a significant effect on this sector.

Likely Impact on U.S. Trade

According to the Commission's sectoral model, increased U.S. imports of furniture and lamps under the URA likely will result in a small increase in the sector's trade deficit. The increase in imports principally will be of standard lighting and RTA and rattan furniture from GATT Asian countries. No significant shifts in sources of U.S. imports are expected as a result of the URA. The effect of the URA on the sector is moderated because of the high level of trade with North American Free-Trade Agreement (NAFTA) partners Canada and Mexico (33 percent of total imports in 1993).³ Virtually all U.S. sector imports from Mexico in 1993 entered either duty-free under the Generalized System of Preferences (GSP) (83 percent) or with a reduced rate of duty under Harmonized Tariff Schedule (HTS) subheading 9802.00.80. China and Taiwan accounted for 35 percent of U.S. imports of furniture and lamps in 1993. Although these non-GATT parties will benefit from reductions in U.S. tariffs, reductions on items principally supplied by China were small.⁴

³ Duties for trade with Canada and Mexico will be reduced under the North American Free-Trade Agreement (NAFTA). For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

⁴ Taiwan formally applied for accession to the GATT in 1990. A working party was established in Sept. 1992 to consider Taiwan's membership. The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

U.S. exports of furniture and lamps likely will increase by a small amount according to the Commission's model. The increase in exports likely will be directed to Europe and Japan. The impact of the URA on exports likely will be reduced because of the significant proportion of U.S. exports that are directed to Canada and Mexico (65 percent in 1993).

Likely Impact on U.S. Production, Employment, and Consumers

According to the Commission's sectoral model, the URA likely will result in a negligible decline in both U.S. production and employment. Decreases in production and employment owing to increased imports will be offset only partially by increases in exports. The decline in production and employment will primarily affect U.S. furniture producers of labor-intensive products, such as wood dining room chairs, rattan furniture, Christmas tree lights, and low-end lamps. U.S. producers' shipments of these products have been declining for a decade. The increase in production and employment primarily will affect U.S. producers for specialty and high-tech markets, such as fully assembled wood household furniture, office furniture, and hi-tech lamp and lighting fixtures.

The URA should increase U.S. investment in distribution outlets and assembly plants (that use U.S. and local origin parts) in South and Central America by a modest amount. U.S. investments in the EU should also increase, but more slowly, because EU tariff reductions are not as significant as reductions granted by countries in South and Central America. In addition, U.S. producers have already established a number of facilities in the EU.

U.S. consumers of sector products are likely to benefit negligibly from the URA, due to a negligible decrease in the price of U.S. products as U.S. producers respond to the small price reductions of GATT and non-GATT imports. Increased imports may increase the variety of available products, contributing to the negligible gain by U.S. consumers.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Consumer Goods for Trade Policy Matters (ISAC 4) endorses the URA because it represents further development of an open system of international trade.⁵ According to this report, high tariffs have hindered the ability of U.S. furniture producers to enter the rapidly growing markets of Latin America and East Asia. As tariff rates decline, U.S. exports likely will increase and this could result in greater total employment in the United States. Reduced tariffs are expected to allow U.S. furniture manufacturers to act aggressively in obtaining a greater share of the international market.⁶ Anticipation of a successfully negotiated URA is partially responsible for the expansion of furniture retail operations in Canada, Mexico, and the EU. Expanded foreign retail activities are expected to increase U.S. employment, because such operations are often supported by products made in United States.⁷

⁵ *Report of the Industry Sector Advisory Committee (ISAC 4) on Consumer Goods for Trade Policy Matters on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

⁶ Jerome Bolick, president, American Furniture Manufacturers Association, Southern Furniture Co. (Conover, NC), USITC staff telephone conversation, Mar. 21, 1994.

⁷ Ethan Allen, Inc. (Danbury, CT), official submission to USITC, Mar. 25, 1994.

CHAPTER 57

Miscellaneous Manufactured Articles ¹

Table 57-1
Miscellaneous manufactured articles: ¹ Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	141	144	146	3.5
Trade data (million dollars):				
Shipments	14,942	15,895	17,674	18.3
U.S. exports:				
Total	775	877	958	23.6
GATT ³ signatories	749	851	926	23.6
Other	26	26	32	23.1
U.S. imports:				
Total	2,805	3,230	3,453	23.1
GATT signatories	2,024	2,252	2,393	18.2
Other	781	978	1,060	35.7
U.S. trade balance:				
Total	-2,030	-2,353	-2,495	(⁴)
GATT signatories	-1,275	-1,401	-1,467	(⁴)
Other	-755	-952	-1,028	(⁴)
Consumption	16,972	18,248	20,169	18.8
Import market share (percent):				
Total	16.5	17.7	17.1	(⁴)
GATT signatories	11.9	12.3	11.9	(⁴)
Other	4.6	5.4	5.3	(⁴)

¹ Data on works of art and antiques have been excluded to avoid distortion. There is no "industry" producing these goods and the U.S. tariff on such goods is free. In 1993, U.S. imports totaled \$2.7 billion; U.S. exports totaled \$952 million.

² Employment and shipment data for 1993 estimated by the staff of the U.S. International Trade Commission.

³ General Agreement on Tariffs and Trade (GATT).

⁴ Not applicable for purposes of comparison.

Note.—Percentage changes are based on rounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Summary of Sector Analysis ² and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will have a negligible positive effect (1 percent or less) on

¹ The following product groups are covered in the discussion of this industry sector: apparel fasteners; certain other leather goods; umbrellas, whips, riding crops and canes; writing instruments and related articles; prefabricated buildings; smokers' articles; brooms, brushes, and hair-grooming articles; and certain other miscellaneous

¹—Continued

articles that include works of art and antiques, certain office products, artificial flowers, and holiday decorations. See app. F, vol. II, for trade tables for this sector and these groups.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) was based on the Commission's sectoral model. As noted in specific assessments of likely impact, estimated effects were modified as needed to reflect consideration of non-quantifiable nontariff barriers (NTBs). For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

the trade balance in the miscellaneous manufactures sector. The URA likely will lead to a negligible increase in production and employment and provide a negligible benefit to U.S. consumers. The negligible effects in this sector are due to the relatively small reductions in U.S. and foreign tariff offers. No other agreements will significantly affect this sector.

Industries in the miscellaneous manufactured articles sector produce diverse products of which the United States is not a major world producer. Sector industries typically consist of small, privately-owned companies that do not have foreign operations and generally are not vertically integrated. In 1993, mobile homes and other prefabricated buildings accounted for an estimated 60 percent of total sector domestic shipments. With the exception of prefabricated buildings,³ U.S. imports of each type of article included in this sector made up one quarter or more of the U.S. market in 1993.

Over the past decade, these industries have become more concentrated as import competition has intensified. Many miscellaneous manufactured products are price-sensitive. China, Taiwan, and Mexico have a competitive advantage because of their generally lower labor costs and, along with Japan, compete in the major markets of the United States, Canada, and the European Union (EU).

Key Uruguay Round Provisions Affecting Sector

Tariff Provisions

The average calculated tariff rate on U.S. imports in this sector was 3.5 percent ad valorem in 1993. Under the URA, duties are to be reduced by 1.4 percentage points, or by 38 percent, resulting in an average tariff level of 2.2 percent ad valorem. The product grouping accounting for the largest share of U.S. imports in this sector is miscellaneous articles, in which U.S. imports of artificial flowers and Christmas ornaments is the largest category,⁴ with an average duty of 2.4 percent ad valorem. The product groups with the highest U.S. duty rates are umbrellas and smokers' articles, with an average duty of 8.2 and 8.1 percent, respectively.

³ U.S. producers of prefabricated buildings accounted for roughly 15 percent of world production in 1993. International trade in prefabricated buildings is limited because of high transportation costs and local building codes. Consequently, domestic markets account for the vast majority of shipments by both U.S. and foreign producers.

⁴ U.S. imports of works of art and antiques have been excluded from the miscellaneous articles category for this analysis; there is no "industry" and a sizeable amount of world shipments is accounted for by re-sale of existing works.

Foreign tariffs on these products generally range from free to 8 percent. Reductions in these tariffs are expected to average 2.6 percentage points (trade-weighted).

Other Provisions

No other URA provisions are expected to have a significant effect on this sector.

Likely Impact on U.S. Trade

Based on the Commission's sectoral model, the URA likely will lead to a negligible increase in U.S. imports and a modest increase (over 5 percent to 15 percent) in U.S. exports, resulting in a negligible positive increase in net trade. The share of the U.S. market for this sector accounted for by U.S. imports from GATT and non-GATT nations is not expected to change as a result of the URA.

Although GATT signatory countries dominate both U.S. imports and U.S. exports in this sector, non-GATT countries were the principal suppliers of certain U.S. imports of sector articles in 1993.⁵ For example, China and Taiwan accounted for 83 percent of U.S. imports of umbrellas in 1993, and were also major suppliers of brooms, brushes, hair-grooming articles, and Christmas ornaments. Taiwan was the leading source for apparel fasteners. On the other hand, GATT-member country Japan was the leading supplier of prefabricated buildings and writing instruments. North American Free-Trade Agreement (NAFTA) partner Mexico accounted for about 20 percent of both U.S. imports of smokers's articles (disposable lighters) and certain leather goods in 1993.

The top markets for the product groups accounting for the largest share of U.S. exports in this sector—prefabricated buildings, writing instruments, brooms, brushes, and hair grooming articles—were Canada and Mexico.⁶

⁵ For this analysis, the United Kingdom, France, and Switzerland, largely exporters of objects of art and antiques in this industry sector, were excluded as major U.S. sources for miscellaneous manufactured articles.

⁶ Taiwan formally applied for accession to the GATT in 1990. A working party was established in Sept. 1992 to consider Taiwan's membership. The People's Republic of China (China) applied in 1986 to resume its status as a contracting party to the GATT. A working party was established in 1987 to review the compatibility of China's economy and trade system with GATT rules. The most recent meeting of the working party was Mar. 1994.

These two trading partners accounted for between 24 and 51 percent of U.S. exports of these products. Duties for trade with Canada and Mexico will be reduced under the North American Free-Trade Agreement (NAFTA). For more information, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Selected Industries of the North American Free-Trade Agreement* (investigation No. 332-337), USITC publication 2596, Jan. 1993.

The most significant increase in U.S. exports in this sector likely will be computer ribbons to Japan and the EU. Japan is reducing its duties on these articles from 4.2 percent to zero, while the EU is offering a reduction from 5.3 to 3 percent for some computer ribbons and to zero for others.

Likely Impact on U.S. Production, Employment, and Consumers

It is likely that there will be a negligible increase in U.S. production and employment because of the net improvement in the U.S. trade balance, according to the Commission's sectoral model. U.S. consumers of these products likely will benefit negligibly from the URA, due to a negligible decrease in the price of U.S. products and a negligible price reduction for GATT and non-GATT imports. Increased imports may

increase the variety of available products, contributing to the negligible gain by U.S. consumers.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Consumer Goods (ISAC 4) endorses the positive progress that the URA represents in developing an open system of international trade.⁸ To date, the Committee has been unable to fully assess the effects of the URA. The disposable lighter industry supports the gradual elimination of tariffs on a reciprocal basis.⁹

⁸ *Report of The Industry Sector Advisory Committee (ISAC 4) on Consumer Goods for Trade Policy Matters on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 7, 1994.

⁹ Industry official, USITC staff interview, Mar. 25, 1994.

PART IX
LIKELY IMPACT OF THE URA ON U.S.
SERVICE SECTORS

Summary of the Likely Impact of the URA on U.S. Service Sectors

- U.S. service sectors covered in detail in this report include audiovisual services, business and professional services (including advertising, accounting, consulting, and legal services), architecture, engineering, and construction services (AEC), tourism, and value—added telecommunication services (VAS))
- U.S. service sectors are generally extremely competitive internationally. U.S. sectors are among the largest and most successful of global service providers.
- Although the U.S. market has historically been very open to foreign service providers, U.S. service providers have faced a number of barriers in foreign markets. These barriers have included quotas and domestic content requirements (audiovisual services), impediments to movements of individuals and recognition of professional qualifications (business and professional services and AEC services), government procurement restrictions (AEC services), and lack of transparency (VAS).
- The most significant Uruguay Round Agreement (URA) affecting U.S. service sectors is the General Agreement on Trade in Services (GATS).² Under the GATS, trade in services will be covered by multilateral disciplines for the first time. In addition, certain services sectors will be affected by agreements on intellectual property rights (audiovisual services) and government procurement (AEC services).
- Generally, the URA are expected to increase the trade surplus in service sectors by a small amount (over 1 percent to 5 percent). Exceptions are the VAS sector, which likely will experience a modest improvement (over 5 percent to 15 percent), and the audiovisual sector, which is expected to benefit by a negligible amount (1 percent or less). Revenues in the service sectors generally are expected to increase by small to modest amounts (over 1 percent to 15 percent) under the URA. Employment is expected to increase by negligible to small amounts (5 percent or less). U.S. consumers are expected to benefit from the URA by a negligible to small degree, largely due to lower prices.

¹ The maritime, financial, and basic telecommunication sectors are subject to further negotiations and therefore are not covered in detail.

² The General Agreement on Trade in Services is discussed in detail in ch. 58.

CHAPTER 58

General Agreement on Trade in Services

The General Agreement on Trade in Services (GATS) is the first multilateral, legally enforceable agreement to establish guidelines governing international trade and investment in services.² The GATS is an integral part of the Agreement Establishing the World Trade Organization (WTO)³ that is scheduled to take effect on January 1, 1995. A Council for Trade in Services, to be established under the General Council of the WTO, is to oversee the functioning of service agreements, additional service negotiations, and several "working parties" on outstanding issues.

The GATS is organized around three fundamental concepts: (1) a framework of rules intended to discipline government regulation of trade and investment in services in order to facilitate trade expansion; (2) a set of schedules wherein each country commits itself to apply the rules to specific sectors, subject to defined exceptions; and (3) a series of annexes and ministerial decisions that supply additional sector-specific detail and set forth follow-up activities.

The "framework" applies to all services except those supplied in the exercise of government authority. The framework of rules obligates parties to respect 15

general principles.⁴ Certain principles, including transparency of laws and regulations, recognition of operating licenses and qualifications to practice a profession, and most-favored-nation (MFN) treatment, are binding on all WTO members. Governments can exempt themselves from the MFN obligation on a sector-by-sector basis, but the exemption is not to exceed 10 years and is subject to review within 5 years. Other principles, including market access and national treatment, are binding only to the extent that each member country commits itself to these particular principles for selected service sectors. For each principle committed to, countries may choose to commit to one or more of the four modes of supply (commercial presence,⁵ consumption abroad,⁶ cross-border supply,⁷ and presence of individuals⁸). A country may also include "horizontal commitments" in its schedule, which may apply to trade in only a limited number of service sectors, or may be specific to only one mode of supply across a broad range of sectors.

Once a country has made a partial or complete commitment on market access or national treatment, the other GATS rules, such as those on domestic regulation, monopolies, and exclusive service

⁴ These principles cover most-favored-nation (MFN) treatment, transparency without requiring disclosure of confidential information, increasing participation of developing countries, economic integration so as not to prevent entrance into labor market integration agreements, domestic regulation, recognition, monopolies and exclusive service suppliers, business practices, emergency safeguard measures, payments and transfers, restrictions to safeguard the balance of payments, government procurement, general exceptions, security exceptions, and subsidies.

⁵ Commercial presence includes corporations, joint ventures, partnerships, representative offices, branches, and other legal entities constituting foreign direct investment.

⁶ Consumption abroad, often referred to as "movement of the consumer," occurs when a service is delivered outside the territory of the member making the commitment. Often, as in tourism services, the movement of the consumer is necessary. Activities where the property of the consumer moves, such as ship repair, are also included in consumption abroad.

⁷ Cross-border supply occurs when a service supplier is not present within the territory of the member where the service is delivered. Examples of this mode are the supply of services through telecommunications or mail; services embodied in exported goods, such as computer disks or drawings; and international transport.

⁸ This mode covers individuals, referred to in GATS terminology as "natural persons," who are themselves service suppliers or who are employees of service suppliers.

¹ General Agreement on Trade in Services (GATS) and Annexes, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations.

² Service industries conduct international transactions either by sending highly skilled personnel, technical information, or currency across national borders, or by performing services for foreign entities through affiliates located overseas. Because service providers employ many different means to deliver services internationally, these firms are potentially vulnerable to many trade impediments. Significant nontariff barriers (NTBs) include restrictions on establishment, denial of national treatment, and other barriers to international flows of personnel, information, and currency.

³ Agreement Establishing the World Trade Organization, Final Agreement Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement provides for establishment of the World Trade Organization (WTO) and sets forth the scope and functions of the WTO. The GATT 1994, the GATS, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), and various other agreements negotiated during the Round are set forth as annexes to the Agreement Establishing the WTO.

suppliers, or payments and transfers, go into effect for that sector with respect to that country's market. The core of the GATS framework of rules is Part III, Specific Commitments, which sets forth market access and national treatment obligations for those areas where signatories have submitted particular scheduled commitments; and Part IV, which requires progressive liberalization of trade in services in a series of negotiating rounds.

Most commitments submitted by individual countries with respect to market access and national treatment are, essentially, promises not to impose new trade restrictions beyond those already operative against foreign service providers, and thus are referred to as "standstill" commitments. Commitments to improve liberalization, particularly in countries that have discriminatory regimes, will hopefully be achieved in the future. The GATS provides the institutional framework to achieve future liberalization in service trade.

The framework agreement also includes exceptions for privacy, confidentiality, national security, and regulation to protect human, animal, or plant life and health. There is also provision for negotiations to minimize trade-distorting effects of subsidies. Important institutional provisions in Part V require signatories to afford other signatories the opportunity for consultation on any matter affecting the operation of the GATS. Such consultation is to follow newly created procedures under the Dispute Settlement Understanding (DSU).⁹ Members can utilize DSU mechanisms, including strict time limits and authorization of retaliation, in order to settle disputes in the service sector or to enforce Uruguay Round Agreement (URA) provisions.

⁹ Understanding on Rules and Procedures Governing the Settlement of Disputes, Annex 2, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The rules and procedures in the Understanding apply to disputes brought pursuant to the consultation and dispute settlement rules and procedures of the 14 agreements relating to trade in goods (including the GATT 1994), the GATS, TRIPs, and, as appropriate, the Plurilateral Trade Agreements in Annex 4, as well as consultations and the settlement of disputes concerning the rights and obligations under the provisions of the Agreement Establishing the World Trade Organization.

Many privately traded services are covered by the GATS. Commitments are scheduled for professional services (accounting, legal, architecture, engineering), other business services (computer services, rental and leasing, advertising, market research, consulting, security services), communications, construction, distribution (wholesale and retail trade, franchising), educational services, environmental services, health services, and tourism services. Certain large and important service areas, such as value-added telecommunication, professional, and certain business services, received significant market access benefits under the GATS.

GATS negotiations were regarded by some as unsuccessful in liberalizing trade rules in audiovisual services.¹⁰ Three other especially sensitive subjects were separately addressed in annexes to the GATS framework agreement—financial services, basic telecommunication services, and air-transport services. With respect to financial services and basic telecommunication services, negotiations will continue, and thus as yet have not improved foreign market access for U.S. suppliers." Under the annex on air-transport services, subject to review at least every 5 years, it was agreed that the GATS does not apply to traffic rights (largely bilateral air-service agreements conferring landing rights), but applies to aircraft repair and maintenance services, selling and marketing of air-transport services (i.e., airline advertising), and computer reservation systems.

Ministerial decisions provide for further negotiation of commitments with respect to financial services, basic telecommunications, maritime transport services, and the movement of individuals. Additional ministerial decisions cover the launch of a work program on professional services (treating accountancy as the top priority), and the establishment of various institutional and procedural arrangements.

¹⁰ *Report of the Services Policy Advisory Committee (SPAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

¹¹ *Ibid.*

CHAPTER 59

Audiovisual Services¹

Table 59-1
Audiovisual services: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000) ¹	359	358	358	-0.3
Trade data (billion dollars):				
Revenues ²	18.0	19.0	20.4	13.3
U.S. exports (receipts) ²	7.5	7.0	7.0	8.4
U.S. imports (payments)	(3)	(³)	(³)	(³)
U.S. trade balance	(3)	(³)	(³)	(³)

¹ U.S. Department of Commerce, Bureau of Economic Analysis, *National Income & Product Account*, annual series (radio and TV employees).

² Based on data from the Motion Picture Association of America (MPAA).

³ Not available.

Source: Compiled by USITC staff from sources cited above.

Summary of Sector Analysis² and U.S. Competitive Position

It is unlikely that the Uruguay Round Agreements (URA) will have more than a negligible beneficial effect (1 percent or less) on trade, revenues, employment, or U.S. consumers of audiovisual services. In addition to the General Agreement on Trade in Services (GATS),³ the agreement on trade-related intellectual property (TRIPs) is important to this sector.

The U.S. audiovisual sector is the largest and most successful in the world. The U.S. motion picture and television industry, concentrated in Southern California, is one of the most successful of U.S. exporters, deriving 41 percent of its revenues from foreign markets in 1993.⁴ Principal markets for U.S.

exports are the European Union (EU) and Japan.⁵ Although information related to U.S. trade in audiovisual services is available, there is no credible source of total worldwide trade or market size.⁶

A major reason for the success of U.S. producers is that the United States is a large homogeneous market, speaking primarily a single language, in which producers may recoup most of their costs in the domestic television market before attempting to export their products. In addition, U.S. producers are technically very proficient and produce films and television programs with high technical quality levels, including spectacular special effects, which foreign audiences find entertaining even with dubbing.⁷

U.S. consumers have access to a wide variety of audiovisual works from foreign and domestic sources. It is estimated that the United States imports \$250 million annually in audiovisual services from the EU. There are no nontariff barriers to imports of audiovisual works. U.S. consumers generally are less receptive to dubbing and subtitling than foreign audiences, and for that reason alone, U.S. demand for foreign products is weak at present. However, demand for Spanish-language programming, including programs dubbed in Spanish, is increasing.

⁵ Ibid.

⁶ Ibid.

⁷ Dubbing is the replacement of an existing soundtrack with a soundtrack of which the dialogue is in a language different from that of the original.

¹ The following services are covered in the discussion of this industry sector: motion picture production and distribution, including television, tape, and film.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) on this sector was based on qualitative factors, including Commission staff expertise, interviews with industry and government officials, and written submissions to the Commission. The absence of tariffs on services trade precluded use of the Commission's sectoral model. For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

³ The General Agreement on Trade in Services is discussed in detail in ch. 58.

⁴ Motion Picture Association of America (MPAA), facsimile to USITC staff, May 10, 1994.

Key Uruguay Round Provisions Affecting Sector

Fourteen countries, including the United States, have made initial commitments to audiovisual services under the GATS. The most significant markets among these are India, Japan, Korea, Malaysia, Singapore, Switzerland, and Thailand. These commitments generally bind the countries to adopt no internal regulations or import rules more restrictive than current law. However, members of the EU—the largest foreign market for U.S. film and television producers—made no commitment to easing trade in audiovisual services.

Copyright violation has been a major problem for both audio and video producers. The TRIPs agreement⁸ makes intellectual property right violations subject to dispute settlement procedures. The agreement also requires copyright protection for movies and sound recordings for 50 years in GATT signatories.

Likely Impact on U.S. Trade

The impact of the URA on trade in the U.S. audiovisual service sector likely will be positive but negligible. U.S. imports will be unaffected, because the United States has no formal barriers on importation of audiovisual services and the demand for dubbed or subtitled foreign films is low. For most countries that made market access commitments under the GATS, U.S. export opportunities will be no more limited than they are today. Opportunities in Korea and Singapore have been expanded. Tariff reductions will be of little benefit to the U.S. industry.

TRIPs likely will benefit the U.S. industry by protecting motion pictures and sound recordings via copyright for 50 years for WTO countries. However, there is no provision in the URA that would ensure that U.S. copyright owners receive non-discriminatory national treatment.

Despite these changes, substantial barriers to U.S. exports remain. Although most countries in the world do not maintain quotas on television programming, the EU reserves at least half of broadcast programming "where practicable" for programming that is European in origin. For broadcast television, the quota provisions are applied to prime time viewing hours, and there are

⁸ Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Annex 1C, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The agreement seeks to provide for, *inter alia*, adequate standards and principles concerning the availability, scope, and use of trade-related intellectual property rights, means for enforcement of such rights, and procedures for the multilateral prevention and settlement of disputes between governments; and a multilateral framework of principles, rules, and disciplines dealing with international trade in counterfeit goods.

additional limits on the number and scheduling of feature films. The same restrictions imposed on broadcast signals would be imposed on signals from satellite and cable sources. The purpose and effect of the quotas are to reduce EU broadcasters' demand for programming from the United States.

Canada and Sri Lanka (both GATT signatories) maintain quotas higher than 51 percent for national-origin broadcasts. Canada requires that 60 percent of television broadcasts be of Canadian origin. Sri Lanka has no limits on television broadcasting, but does limit the number of movie theaters that show foreign language films. France requires that at least 40 percent of television programming must be of French language origin, with an additional 20 percent of European origin.

Likely Impact on U.S. Revenues, Employment, and Consumers

The likely impact of the URA on revenue and employment in the U.S. audiovisual service sector likely will be positive but negligible. As indicated previously, U.S. demand for foreign films is weak, thus U.S. consumers are expected to be unaffected by the URA.

Effective enforcement of intellectual property rights would increase U.S. copyright holders' revenues considerably as a result of the URA. However, given that few countries have made commitments to audiovisual services under the GATS, the URA likely will have a negligible positive impact on U.S. industry revenues and employment. Programming exported by the United States is originally produced for domestic consumption, and is exported with a minimum of reworking required (for example, dubbing of the audio track and minor editing of scenes). Thus, it is unlikely that increased exports will result in more than a negligible increase in employment or output.

U.S. Industry Positions on the URA

The U.S. audiovisual industry in general does not support the URA as concluded. The Advisory Committee on Trade Policy and Negotiations (ACTPN), the Industry Sector Advisory Committee on Services (ISAC 13), and the Services Policy Advisory Committee (SPAC) all expressed disappointment that most trading partners, and particularly the EU, did not make serious commitments to liberalizing trade in audiovisual services. All these committees indicated that the U.S. Government should use aggressively all remedies available to it, including section 301 of the Trade Act of 1974, and the government procurement provisions of title VII of the Omnibus Trade and Competitiveness Act of 1988. The U.S. Government should also develop other appropriate legislation to

achieve fair and equitable market access in this and other key service sectors, according to industry representatives.⁹ In addition, the SPAC and ACTPN recommended that the United States Trade Representative pursue the establishment of a Sectoral Committee on Trade in Audiovisual Services under the GATS, which would keep the application of the GATS to audiovisual services under continuous review.¹⁰ ISAC 13 recommended establishing as a specific negotiating objective the attainment of liberalizing commitments on audiovisual services in countries representing at least 90 percent of the U.S. market for these services."

The U.S. industry contends that legitimate cultural concerns have been submerged in what is clearly a commercial issue.¹² Although the Recording Industry Association of America (RIAA) is pleased that

⁹ *Report of the Advisory Committee on Trade Policy and Negotiations (ACTPN) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

¹⁰ *Ibid.*; and *Report of the Services Policy Advisory Committee (SPAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

¹¹ *Report of the Industry Sector and Functional Advisory Committees (ISAC/IFAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

¹² Jason S. Berman, Chairman and CEO of the Recording Industry Association of America (RIAA), *SPAC Report*, app., Jan. 1994.

intellectual property protection for sound recording will be covered by the GATS, it was disappointed by the absence of an EU commitment to provide open market access for entertainment services and by the lack of a provision ensuring non-discriminatory national treatment to U.S. copyright owners.¹³ The GATS also contains an exception to the exclusive right afforded to sound recording copyright owners to control the commercial rental of their recordings. RIAA contends that unauthorized commercial rental completely destroys the sales market for sound recordings and renders the reproduction right under copyright entirely meaningless.

The Motion Picture Export Association of America (MPEAA) notes that the URA failed to obtain market access and national treatment commitments in over 80 percent of the U.S. industry's foreign markets. The MPEAA feels that the TRIPs agreement does establish baseline standards for intellectual property protection and enforcement. However, long transition periods for developing countries and ambiguities in national treatment provisions may cost the U.S. entertainment industry potential revenues.¹⁴

¹³ *Ibid.*

¹⁴ Motion Picture Export Association of America (Washington, DC), official submission to U.S. International Trade Commission (USITC), May 2, 1994.

CHAPTER 60

Business and Professional Services¹

Table 60-1
Business and professional services: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000) ¹	2,257	2,307	2,347	4.0
Trade data (billion dollars):				
Revenues ¹	208	211	220	6.0
U.S. exports (receipts) ²	11	(³)	(³)	(³)
U.S. imports (payments) ²	4	(³)	(³)	(³)
U.S. trade balance ²	7	(³)	(³)	(³)

¹ Estimated by the staff of the U.S. International Trade Commission (USITC), and U.S. Department of Commerce, *U.S. Industrial Outlook 1994* (Washington, DC: Government Printing Office, Jan. 1994), pp. 51-1 through 51-6. The data include estimates for services management consulting, management, public relations, facilities support management, and business consulting services; accounting, auditing, and bookkeeping services; legal services; and advertising services.

² U.S. Department of Commerce, and estimated by the staff of the USITC. Data for legal services are not available.

³ Not available.

Source: Compiled by USITC staff from sources cited above.

Summary of Sector Analysis² and U.S. Competitive Position

For the business and professional service sector, the Uruguay Round Agreements (URA) are likely to result in a small increase (over 1 percent to 5 percent) in the U.S. trade balance and up to a modest increase (over 5 percent to 15 percent) in revenues for U.S. firms. Benefits for U.S. employment or U.S. consumers are likely to be positive, but small. Greater benefit is expected as a result of subsequent liberalization efforts, the basis for which are present in the General Agreement on Trade in Services (GATS).³

The following services are covered in the discussion of this industry sector: advertising, accounting, management consulting, and legal services. Accounting services include accounting, auditing, bookkeeping, tax services, and related consulting services.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) on this sector was based on qualitative factors, including Commission staff expertise, interviews with industry and government officials, and written submissions to the Commission. The absence of tariffs on services trade precluded use of the Commission's sectoral model. For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

³ The General Agreement on Trade in Services is discussed in detail in ch. 58.

The U.S. business and professional service sector, the world's largest and among the most competitive internationally, is fragmented and varies considerably in size and scope, ranging from large multinational firms that dominate the market in advertising to highly specialized sole practitioners and medium-sized companies that characterize most legal service firms. In 1993, U.S. revenues in the sector were estimated to exceed \$220 billion, and employment was estimated at 2.3 million.⁴ Large firms in the business and professional service sector experienced slower growth, or even decreases in revenues, and reductions in employment in the early 1990s as a result of the economic downturn that affected large corporate clients. At the same time, increased use of computers and specialized software resulted in higher productivity, reduced costs, and improved response time. Employment patterns have also changed due to various factors, including increased numbers of accounting or financial paraprofessionals performing functions once reserved for fully accredited accountants. The management consulting industry has grown at double-digit rates since the 1980s, but is beginning to experience pressures similar to those of

⁴ U.S. Department of Commerce, *U.S. Industrial Outlook 1994*, (Washington, DC: Government Printing Office, Jan. 1994), p. 51-1.

other professional specialties, including fierce competition for market share.⁵

The U.S. business and professional service sector competes intensively in major world markets based on advantages, such as cost, reputation, and expertise, with the greatest competition coming from European and Japanese firms. U.S. firms are reportedly entering foreign markets through mergers and acquisitions of indigenous business and professional firms, where markets are less saturated than in the United States and more rapid growth is therefore possible.⁶

Key Uruguay Round Provisions Affecting Sector

Member countries developed an Annex on Movement of Natural Persons Supplying Services Under the GATS that allows signatories to negotiate specific commitments relating to the ability of certain categories of natural persons (individuals), such as management consultants, to provide services in general or in certain sectors within the territory of a signatory. Related Ministerial Decisions will establish separate groups to negotiate on further liberalization in movement of individuals for the purpose of supplying services and to examine, report, and to recommend disciplines necessary to ensure that measures related to qualification requirements and procedures, technical standards, and licensing requirements for professional services do not constitute unnecessary barriers to trade.⁷ The first group is to conclude negotiations and report within 6 months after entry into force of the agreement establishing the World Trade Organization (WTO), and commitments resulting from these negotiations are to be included in members' schedules of specific commitments. No timetable has been adopted for the second group.

Under the GATS, most of the leading country providers of professional services submitted schedules of initial commitments concerning market access and national treatment. These schedules will be legally binding and enforceable under the WTO, as will subsequent commitments made as a result of future liberalization to which all member countries agreed in principle.

⁵ Ibid., p. 51-4.

⁶ Ibid., p. 51-1.

⁷ The Ministerial Decision to establish the working party on professional services is to be recommended for adoption at the first meeting of the Council for Trade in Services. The first priority of the working party on professional services will be to make recommendations with regard to the accountancy industry, concentrating on ensuring objective and transparent criteria that are not unnecessarily burdensome, using international standards, encouraging cooperation with relevant international organizations, establishing guidelines for recognizing qualifications, and taking account of the importance of governmental and non-governmental bodies regulating professional services.

A preliminary assessment of offers from major U.S. trading partners shows that about 50 countries committed to accounting services and to management consulting, at least 40 to tax services and to advertising services, and approximately 30 to legal services. Overall, initial commitments to these services in national schedules formalize the status quo in market access and national treatment, with most signatories committing not to restrict further the establishment of services and not to treat foreign providers of services differently from indigenous providers.

U.S. accounting and consulting firms principally face restrictions on cross-border payment of fees and other remittances; on movement of professional, managerial, and technical personnel; on licensing; and on recognition of professional qualifications obtained abroad.⁸ These problems are addressed in the GATS framework provisions on domestic regulation, recognition, payments and transfers, market access, and national treatment. Certain GATS provisions important to the U.S. accounting profession, such as those regarding payments and transfers, automatically take effect upon the commitment by a country to include this sector in its national schedule. In addition, a few countries eliminated citizenship requirements or other limitations on foreign accounting and tax providers. However, countries generally retained regulatory limitations on the types of services, organizations, and foreign investment permitted in accountancy.

Currently, advertising services are considered liberalized in the United States, Europe, Japan, and Canada. Elsewhere, restrictions on advertising of certain commodities, and limitations on foreign participation, local-content requirements, and transparency affect advertising service providers in more restrictive markets.

Legal services encounter the most restrictions of the business and professional services, with certain major U.S. trading partners in Europe and Asia maintaining current limitations, or taking exemptions on a most-favored-nation (MFN) basis to the sector. In contrast to the numerous restrictions on legal services, relatively few market-access and national-treatment limitations apply to management consulting services, because consulting services are not usually subject to licensing and regulation on a par with lawyers or other professions.

Likely Impact on U.S. Trade

The net benefit of the URA on U.S. trade in business and professional services likely will be small at most. The U.S. market for business and professional services is attractive to foreign service providers, because it is highly liberalized and contains more than 40 percent of the world's multinational companies. Several major advertising agencies in the United States

⁸ *Report of the Industry Sector and Functional Advisory Committee (ISAC/IFAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

are owned by Japanese and British firms. Additional foreign ownership of U.S. professional service firms is a possible long-term outcome of the URA, although the U.S. market is considered saturated and therefore the growth rate of such firms in the U.S. market is expected to be considerably below that in foreign markets,⁹ making such ownership relatively less attractive.

Limitations on new restrictions and the relaxation of a few constraints are likely to reduce uncertainties and costs. Successful negotiations on other issues, such as movement of individuals, could lead to significant liberalization. New trading rules under the GATS apply to sub-national government entities and non-governmental bodies exercising regulatory powers, which may significantly affect regulation of professional services at the State, Provincial, or regional level.¹⁰ Gains in the U.S. trade balance are most likely to result from increased payments for professional services from countries in Asia, Eastern Europe, and Latin America.¹¹

Likely Impact on U.S. Revenues, Employment, and Consumers

The URA likely will result in a small to modest increase in revenues for the sector overall. Providers of management consulting services have fewer restrictions with respect to national treatment and, therefore, may benefit relatively more than other professions in long-term revenue growth as a result of the URA. Provisions affecting business and professional service providers are likely to have a small positive impact on U.S. employment and consumers. Small gains in U.S. employment may result from foreign providers seeking to expand in the U.S. market, and price effects of such activity on U.S. consumers are expected to be small.

⁹ *U.S. Industrial Outlook 1994*, p. 51-1.

¹⁰ *ISAC/IFAC Report*, Jan. 1994.

¹¹ *ibid.*

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Services for Trade Policy Matters (ISAC 13) supports Congressional approval of the URA, including the GATS as it pertains to business and professional services.¹² The advertising industry component of ISAC 13 believes the GATS will improve the sector's international operating environment in two respects: (1) the framework rules will benefit the industry by making laws and regulations transparent; and (2) rules on domestic regulation, monopolies, payments and transfers, and government procurement may benefit advertising agencies, depending upon scheduled commitments by signatories and further liberalization in these areas. The advertising industry is encouraged that several Asian and Latin American developing countries have scheduled commitments with respect to market access and national treatment in advertising, even though conditions or exceptions to some commitments will apply in certain countries.

The accounting profession and associated consulting service providers report that the GATS addresses obstacles that impede their respective international operations, representing a significant beginning toward liberalization. It is believed that subsequent work on professional services will contribute significantly to internationalization of the profession, ultimately benefitting both providers and consumers of such services.

The majority of members of the Services Policy Advisory Committee (SPAC)¹³ report that the URA merit Congressional approval,¹³ stating that some large and important sectors, such as business and professional services, achieved significant progress and that further liberalization can occur. A member of the SPAC¹⁴ who supports the URA states that global alliances of various kinds of service firms will also hasten liberalization, as demonstrated by the growth and internationalization of consulting and accountancy firms.

¹² *ISAC/IFAC Report*, Jan. 1994.

¹³ *Report of Services Policy Advisory Committee (SPAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

¹⁴ Harry L. Freeman, president, The Freeman Co., *SPAC report*, app., Jan. 1994.

CHAPTER 61

Architectural, Engineering, and Construction (AEC) Services

Table 61-1
Architectural, engineering, and construction (AEC) services: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000) ¹	5,158	5,145	5,348	3.7
Trade data (billion dollars):				
Revenues	421	455	(2)	(2)
U.S. exports (receipts)	74	78	(2)	(2)
U.S. imports (payments)	14	10	(2)	(2)
U.S. trade balance	60	68	(2)	(2)

¹ Employment statistics are for architects, civil engineers, and the construction trades, including supervisors.

² Not available.

Sources: Employment based on data provided by U.S. Bureau of Labor Statistics official, interview by U.S. International Trade Commission (USITC) staff, Mar. 31, 1994; revenues estimated by USITC staff based on U.S. Department of Commerce, *U.S. Industrial Outlook 1994*, p. 5-3; and *Engineering News-Record*, McGraw-Hill, July 20, 1992, Aug. 24, 1992, July 26, 1993, and Aug. 23, 1993; and import and export estimates derived from *Engineering News-Record*, McGraw-Hill, July 20, 1992, Aug. 24, 1992, July 26, 1993, and Aug. 23, 1993.

Summary of Sector Analysis' and U.S. Competitive Position

The Uruguay Round Agreements (URA) likely will have a small positive effect (over 1 percent to 5 percent) on U.S. architectural, engineering, and construction (AEC) services trade. Similarly, U.S. revenues likely will increase by a small degree. The effect of the URA on U.S. employment and on consumers is likely to be positive, but negligible (1 percent or less). In addition to the General Agreement on Trade in Services (GATS),² the government procurement agreement is expected to increase revenues by a small degree in this sector.

The United States is the leading provider of AEC services to the global market. In 1992, an estimated 80 U.S. design firms (including architectural and

engineering firms) participated in the international market, earning \$6.1 billion and accounting for 51 percent of the international market.³ Although Europe as a regional group had an estimated 84 design firms participating in the international market, their earnings were over 23 percent less than U.S. firms' earnings, at \$4.7 billion, or 39 percent of the international market. Similarly, in 1992, 72 U.S. construction firms accounted for 49 percent of the international market, while 80 European contractors accounted for 36 percent of the international market.⁴

The European Union (EU), Asia, and the Middle East are the largest foreign markets for U.S. AEC firms. In 1992, U.S. design firms earned an estimated \$2.3 billion in Europe, \$1.4 billion in Asia, and \$1.0 billion in the Middle East. During the same year, U.S. construction contractors earned an estimated \$21.0 billion in Asia, \$17.0 billion in the Middle East, and \$16.8 billion in Europe.⁵

¹ Analysis of the likely impact of the Uruguay Round Agreements (URA) on this sector was based on qualitative factors, including Commission staff expertise, interviews with industry and government officials, and written submissions to the Commission. The absence of tariffs on services trade precluded use of the Commission's sectoral model. For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

² The General Agreement on Trade in Services is discussed in detail in ch. 58.

³ Those contracts in the global market won by non-domestic firms; in other words, the international export market. In 1992, the international design market was worth \$12.0 billion; the international construction market was worth \$146.5 billion.

⁴ *Engineering News-Record*, McGraw-Hill, July 26, and Aug. 23, 1993.

⁵ Ibid.

As a general rule, AEC firms that are successful in winning contracts abroad must possess not only experience with advanced technology, but also superior organizational skills. In recent years, program and construction management has been enhanced by highly sophisticated computer-based data analysis, a field in which the United States reportedly has a substantial lead.⁶ However, industry sources report that since the mid-1980s, the U.S. construction industry and government officials have been concerned with the increasing competitive challenge that U.S. contractors are facing in the global market. Some industry officials consider U.S. academic institutions to have among the best construction-related research programs in the world. Nevertheless, construction industries in other countries are emerging as superior construction researchers through increased expenditures and enhanced practical application of research results.⁷

Key Uruguay Round Provisions Affecting Sector

The principle of transparency contained in the GATS Framework Agreement requires public availability of all laws, regulations, and international agreements that affect service sectors. This is particularly important for AEC services providers, because lack of transparency in the solicitation of bids and awarding of contracts in certain overseas markets has been a concern of U.S. AEC firms. The agreement also contains obligations with respect to recognition requirements, such as educational background, for the purpose of securing authorizations, licenses, or certification in the services area. The agreement encourages recognition requirements achieved through harmonization of internationally-agreed criteria.

The GATS framework is likely to benefit from new dispute settlement rules developed in the Uruguay Round.⁸ These rules likely will increase U.S. AEC firms' leverage in disputes over foreign restrictions on services trade and investment. The new rules will allow the United States to automatically take action on behalf of U.S. AEC services providers against foreign government practices that have been condemned by a GATS dispute panel.

⁶ United Nations Conference on Trade and Development, *Information Technology and International Competitiveness: The Case of the Construction Services Industry*, 1993, p. 49.

⁷ Civil Engineering Research Foundation, Japan International Research Task Force, *Transferring Research into Practice: Lessons from Japan's Construction Industry*, Nov. 1991, p. 4.

⁸ Understanding on Rules and Procedures Governing the Settlement of Disputes, Annex 2, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. The rules and procedures in the Understanding apply to disputes brought pursuant to the consultation and dispute settlement rules and procedures of the 14 agreements relating to trade in goods (including the GATT 1994), the General Agreement on

Over half of the participating countries have scheduled commitments for engineering professional services, and 24 countries have scheduled commitments for construction services. Most foreign offers, or commitments, are limited to requiring commercial presence in the country to perform the service, while the U.S. commitment on engineering is unrestricted, except for local license requirements in 12 States and the District of Columbia. For construction, the U.S. commitment permits the establishment of a commercial presence and allows for cross-border movement of professional personnel.⁹

Where countries have "scheduled" commitments, subject to any reservations taken, U.S. AEC firms should benefit from the following: (1) U.S. service providers will have the right to sell services by exporting them across borders, or by providing them through affiliates established in the other country; (2) foreign regulators must allow U.S. services firms to enter and operate in their markets on the basis of national treatment; (3) foreign monopolies will be prohibited from using their monopoly powers unfairly to hinder the business activities of U.S. firms; (4) foreign countries will be obliged to ensure that U.S. service companies have reasonable and non-discriminatory access to telecommunications networks in order to carry out business in a "scheduled" sector; and (5) any national treatment or market access commitments that foreign countries make to each other regarding services will be available to U.S. companies as well. This will eliminate the possibility of discriminatory bilateral agreements.¹⁰

Regarding the movement of personnel, the GATS establishes a basis for countries to make commitments for the temporary admission and residency for individuals providing services. Most countries have made commitments for the temporary admission of persons providing services, or have indicated a willingness to do so in the future. This is an important feature of the URA for AEC services providers because of the technical nature of the work that architects and engineers perform.

With regard to AEC services, the new government procurement agreement¹¹ expands coverage to include

⁸—Continued

Trade in Services, the Agreement on Trade-Related Aspects of Intellectual Property Rights, and, as appropriate, the Plurilateral Trade Agreements in Annex 4, as well as consultations and the settlement of disputes concerning the rights and obligations under the provisions of the Agreement Establishing the World Trade Organization.

⁹ *Report of the Services Policy Advisory Committee (SPAC) on the Uruguay Round of Multinational Trade Negotiations*, statement of Mr. Henry L. Michel, chairman, Parsons Brinckerhoff, Inc. (concurrent with Eric Miller, chairman and CEO, Miller-Kerr, Inc.), Jan. 1994, p. 20.

¹⁰ U.S. Trade Representative (USTR) official, U.S. International Trade Commission (USITC) staff telephone interview, May 13, 1994.

¹¹ Agreement on Government Procurement, Annex 4B, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations. A revised text is

services and construction contracts. The agreement covers procurement of services and construction contracts above thresholds of SDR¹² 130,000 and SDR 5 million, respectively.

Agreement provisions include the restriction of the use of offsets;¹³ the requirement that each country to establish local bid challenge systems, which should significantly improve enforcement; and increased flexibility in the new code for new efficiencies in procurement practices.¹⁴

Agreement was reached between the United States and the EU concerning government procurement. The points of the agreement include the following:

- **Central Government Procurement**—The agreement applies to procurement of goods and services over a threshold of SDR 130,000 (approximately \$182,000) and construction services over a threshold of SDR 5 million (approximately \$7 million). In the United States, the Federal Aviation Administration is excluded; in the EU, the procurement of air traffic control equipment is excluded. The United States will extend this agreement coverage, with a few minor differences, to all signatories to the Government Procurement Code (the EU, most European Free-Trade Association (EFTA) countries,¹⁵ Japan, Korea, and Israel).¹⁶
- **Sub-Central Government Procurement**—In the United States, procurement by 37 States of goods and services over a threshold of SDR 355,000 (approximately \$500,000) and

¹¹—Continued

expected to enter into force January 1, 1996. The revised text seeks to increase transparency in the laws, regulations, procedures, and practices relating to government procurement and seeks to ensure that they are not used as barriers to trade. Negotiations to expand coverage to subcentral governments and government-owned utilities will continue with the European Union (EU), Japan, and Canada.

¹² Special drawing rights (SDR), is a value calculated by the International Monetary Fund (IMF). Five currencies—the German mark, the French franc, the British pound sterling, the Japanese yen, and the U.S. dollar—are assigned a weight, based on the U.S. dollar, which is recalculated every 5 years. Each of the five weights are divided by the respective daily noon spot exchange rate from London, and then added together to determine the daily SDR value. IMF official, USITC staff telephone interview, Jan. 31, 1994.

¹³ Offsets are measures used to encourage local development or improve balance of payments accounts by means of domestic content, licensing technology, investment requirements, countertrade, or similar requirements.

¹⁴ USTR official, USITC staff telephone interview, May 12, 1994.

¹⁵ Austria, Finland, Iceland, Liechtenstein, Norway, Sweden, and Switzerland.

¹⁶ Office of the United States Trade Representative, "Fact Sheet - U.S.-EU Procurement Agreement," Apr. 1994.

construction services over a threshold of SDR 5 million is covered, with certain procurement exempted by some States. In the EU, procurement by all sub-central government entities of goods over a threshold of SDR 200,000 (approximately \$280,000) is covered. The United States will extend this agreement coverage to Israel and Korea.¹⁷

- **Government-Controlled Entities**—Procurement, with thresholds, by certain government-controlled entities is included in the agreement, including, for the United States, the Tennessee Valley Authority, the Power Marketing Administrations of the U.S. Department of Energy, the St. Lawrence Seaway, the Port Authority of New York and New Jersey, the Port of Baltimore, the New York Power Authority, and rural power authorities funded by the Rural Electrification Administration. In the EU, subject entities include those involved in production, transport, or distribution of electricity, and those in the field of maritime or inland port or other terminal facilities. The United States will extend this agreement coverage to Israel and Korea.¹⁸

Likely Impact on U.S. Trade

The U.S. trade surplus in AEC services likely will increase by a small amount as a result of the URA. U.S. firms likely will increase their overseas billings as a result of the URA, while imports of AEC services are not expected to increase as a direct result of the URA. The GATS likely will make it easier for U.S. construction and related firms to compete for non-government projects in the world market. This market is estimated to be worth \$3 trillion annually. Moreover, the government procurement agreement is expected to open foreign public-sector procurement markets to U.S. AEC firms. The agreement now covers construction contracts above an approximate \$7 million threshold.

Likely Impact on U.S. Revenues, Employment, and Consumers

U.S. revenues likely will increase by a small amount as a result of the URA agreement. Successful completion of negotiations that achieve substantial commitments from U.S. trading partners may open up certain overseas AEC markets, increasing revenue in the sector.

The effect of the URA on U.S. employment likely will be positive, but negligible. U.S. commitments for the temporary admission of management and certain

¹⁷ Ibid.

¹⁸ Ibid.

specialized professionals are based on current U.S. immigration law. Because contractors do not bring entire crews with them when working overseas, total employment in the industry is not likely to be significantly affected by the URA.

The effect of the URA on U.S. consumers of AEC services is likely to be positive, but negligible. Prices in the United States for AEC services are not expected to be affected by the agreement; a notable increase in competition from foreign firms in the U.S. market is not expected. According to industry sources, this is because the U.S. market was essentially open prior to the Uruguay Round negotiations; any additional influx of foreign AEC firms to the U.S. market is not expected as a result of the URA.

U.S. AEC service providers likely will benefit from increasingly transparent and secure commitments from foreign countries that will enable these services firms to more easily secure admission for personnel that provide services, such as engineers and construction project managers. Any increase in the establishment of overseas subsidiaries by U.S. and

foreign AEC firms as a result of the URA are expected to be negligible.

U.S. Industry Positions on the URA

Members of the Industrial Sector Advisory Committee on Services (ISAC 13) have reported that the construction and engineering industry supports the GATS and its provisions on domestic regulation, recognition, and payments and transfers. They note that the agreement has made some progress in obtaining sectoral commitments on market access and national treatment. The committee expects that further efforts will be made to equalize the benefits to the United States of foreign market access and national treatment commitments for the construction and engineering industries.¹⁹

¹⁹ *Report of the Industrial Sector and Functional Advisory Committees (ISAC/IFAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994, p. 14.

CHAPTER 62

Tourism Services¹

Table 62-1
Tourism services: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	6,000	5,900	¹ 6,100	1.7
Trade data (billion dollars):				
Revenues	344	379	380	10.5
U.S. exports (receipts)	64	71	74	15.6
U.S. imports (payments)	45	51	49	8.4
U.S. trade balance	19	20	25	32.8

¹ Projected by the U.S. Travel and Tourism Administration (USTTA).

Sources: U.S. Department of Commerce, Bureau of Economic Analysis, USTTA; U.S. Travel Data Center.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA), particularly the General Agreement on Trade in Services (GATS),³ likely will have a small positive impact (over 1 percent to 5 percent) on the U.S. balance of payments and revenues of U.S. firms in the tourism sector. The effects on employment and consumers are likely to be negligible but positive (1 percent or less). International travel is subject to change as a result of numerous market factors affecting demand that have little relationship to tourism-trade liberalization, including personal income, foreign exchange fluctuation, and public safety concerns.

The United States is the world leader in generating receipts from international tourism trade.⁴ In 1993, the

¹ The tourism sector consists of services purchased during travel for pleasure from widely diversified industries, and includes transportation, lodging, food and beverage, recreation, retail trade, travel agencies, and tour operators.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) on this sector was based on qualitative factors, including Commission staff expertise, interviews with industry and government officials, and written submissions to the Commission. The absence of tariffs on services trade precluded use of the Commission's sectoral model. For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

³ The General Agreement on Trade in Services is discussed in detail in ch. 58.

⁴ U.S. Travel and Tourism Administration (USTTA), *Industry Outlook*, Oct. 1992.

United States had a surplus in tourism trade amounting to \$25 billion, a 23-percent increase from the previous year's surplus. The United States earned more than twice as much as France, which ranks second in the world tourism market. Nearly 45 million foreign visitors to the United States spent \$74 billion on tourism services in 1993, an increase of 4 percent from the previous year. The United States earned foreign tourism receipts principally from Japan, Canada, Mexico, Germany, France, the United Kingdom, and Italy. These nations accounted for 80 percent of all international travelers to the United States and 62 percent (\$46 billion) of international travel receipts earned by U.S. industry. Japan was the major source of U.S. tourism receipts (\$9 billion) with a daily average of \$118 per visitor, followed by Canada (\$8 billion) and Mexico (\$6 billion). Canadian and Mexican visitors accounted for the largest number of trips to the United States (42 and 18 percent, respectively), but visitors from these countries spent considerably less per visit than Japanese tourists. In 1993, U.S. payments to foreign countries as a result of U.S. citizens traveling abroad amounted to \$49 billion, of which the principal beneficiaries were Mexico (\$5.2 billion), the United Kingdom (\$3.9 billion), and Japan (\$3.2 billion).

In addition to its positive contribution to the 1993 U.S. trade balance, the U.S. tourism sector was among the most significant components of the U.S. economy. The sector employed 6 million workers, second only to health services, mainly in small, privately owned

businesses. Tourism also accounted for 6 percent of U.S. gross domestic product, an estimated \$380 billion in revenue (including spending by foreign travelers).⁵

Key Uruguay Round Provisions Affecting Sector

The most important provision of the URA affecting the tourism sector is the GATS, which legally establishes and binds signatories to the principles upon which trade in tourism services is to be based. U.S. tourism providers seeking to operate abroad will benefit from GATS provisions specifying that (1) a foreign government must treat U.S. companies the same way it treats the local competition, and (2) U.S. companies must have access to relevant government rules and regulations.

In general, individual countries' schedule of initial commitments regarding tourism services, chiefly supplied via cross-border and commercial presence, represent a gain for U.S. tourism providers. Under the GATS, barriers that hinder U.S. travel companies setting up businesses abroad are likely to be reduced. Such barriers include limits on foreign investment, restrictions on foreign share of ownership, and requirements to hire local workers.

Likely Impact on U.S. Trade

The URA likely will have a small positive effect on the U.S. trade surplus in the long term. U.S. providers are likely to offer enhanced travel services to foreign customers, through U.S.- and foreign-based facilities. As governments remove nontariff barriers on foreign competitors, there likely will be a corresponding increase in the demand for and sale of travel services between signatories.

Increases in U.S. payments to GATT trading partners as a result of the URA are likely to be negligible, because U.S. citizens are already free to travel abroad with very few U.S. Government restrictions on the movement of personnel and funds.

U.S. receipts from GATT countries are likely to increase by a small degree as gains in market access and national treatment enable U.S. tourism firms to

⁵ Ibid.

establish foreign affiliates to attract more visitors to the United States, especially from countries benefiting from rising personal incomes. The elimination of trade barriers faced by U.S. companies will have a positive impact on trade in travel services, as more developing countries permit the movement of people and funds to off-shore destinations around the world.

Likely Impact on U.S. Revenues, Employment, and Consumers

The URA likely will have a small positive impact on revenues of U.S. companies establishing foreign affiliates. GATS tourism provisions are expected to have a negligible positive impact on U.S. employment in the tourism sector. The industries most affected by tourism trade, such as hotels, motels, and food, will show little employment change, due to current excess capacity. The likely impact on U.S. consumers will be negligible but positive, because there are few currency restrictions in effect for U.S. travelers to foreign countries.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Services for Trade Policy Matters (ISAC 13) supports the URA.⁶ The members of ISAC 13 take the position that international impediments that restrict travelers or tourism services should be removed. ISAC 13 believes that important new rules established under the GATS, especially with respect to national treatment, transparency, and dispute settlement and enforcement, will directly benefit U.S. companies in developing international travel and tourism services. New investment and services guidelines, coupled with specific, although limited, liberalized commitments made by certain countries during the negotiations, are likely to spur international travel and open new opportunities for U.S. travel-related companies.

⁶ *Report of the Industry Sector and Functional Advisory Committee on Services for Trade Policy Matters (ISAC/IFAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

CHAPTER 63

Value-Added Telecommunication Serviced

Table 63-1
Value-added telecommunication services: Selected U.S. sector data, 1991-93

Item	1991	1992	1993 ¹	Percentage change, 1991-93
Employees (1,000)	(1)	(1)	(1)	(1)
Trade data (million dollars):				
Revenues	2,500	3,000	3,400	36.0
U.S. exports (receipts)	47	62	77	63.8
U.S. imports (payments)	(2)	1	1	21.7
U.S. trade balance	47	61	76	61.7

¹ Not available.

² Less than \$500,000.

Sources: U.S. Department of Commerce and estimated by the staff of the U.S. International Trade Commission.

Summary of Sector Analysis² and U.S. Competitive Position

The Uruguay Round Agreements (URA), particularly the General Agreement on Trade in Services (GATS),³ could modestly increase (over 5 percent to 15 percent) the trade surplus in value-added telecommunication services (VAS) as newly liberalizing GATT members open VAS markets to U.S.

¹ The following services are covered in the discussion of this industry sector: network services including packet transmission and protocol conversion; information services, such as on-line databases and electronic yellow pages; messaging and conferencing services, such as voice messaging, electronic mail, specialized facsimile services and autoconferencing; and specialized data services that include frame relay, transaction processing services, such as electronic data interchange (EDI), and new digital services introduced over the Integrated Services Digital Network (ISDN). See U.S. Department of Commerce, *U.S. Industrial Outlook 1994*, (Washington, DC: GPO, Jan. 1994), p. 29-7.

² Analysis of the likely impact of the Uruguay Round Agreements (URA) on this sector was based on qualitative factors, including Commission staff expertise, interviews with industry and government officials, and written submissions to the Commission. The absence of tariffs on services trade precluded use of the Commission's sectoral model. For more information on the methodology used in the Commission's analysis, see ch. 1 and app. E.

³ The General Agreement on Trade in Services (GATS) is discussed in detail in ch. 58.

firms. This would increase revenues and benefit the U.S. industry, and would have a small (over 1 percent to 5 percent) positive effect on U.S. employment. U.S. consumers in the VAS sector already enjoy a fully liberalized market, so the result of the URA is expected to be positive, but negligible for consumers.

The domestic VAS sector is the largest and most competitive in the world. Precise data on revenues for the VAS market are difficult to obtain, because companies seldom report revenues for unregulated, privately operated, value-added networks. Industry estimates reportedly valued the U.S. market for VAS at approximately \$3.4 billion in 1993, comprising about one-fourth of the total worldwide market for value-added telecommunication services. The market grew at an average annual rate of approximately 20 percent in the past several years. The leading six firms accounted for about one-half of VAS revenues.⁴

Domestic VAS firms enjoy strong competitive advantages in the U.S. market, and the requisite knowledge and skills have been readily transferrable to foreign markets. A decade ago, most foreign telecommunication services were provided by national monopolies. As new overseas markets are opened to foreign investment and participation, it is likely that U.S. firms will be able to further boost exports. The industry reports that the developing world is interested in establishing modern telecommunication infra-

⁴ *U.S. Industrial Outlook 1994*, p. 29-7.

structures and fostering high quality voice and data services in order to maximize economic growth and social welfare.⁵

Key Uruguay Round Provisions Affecting Sector

Aside from trading partners with which the United States already has formal value-added service agreements, U.S. industry officials perceive that numerous countries appear to have offered relatively liberalized VAS commitments of interest to U.S. firms. These countries are said to include the former Eastern Bloc countries, Hungary, Romania, the Czech Republic, and the Slovak Republic; certain Latin American countries, including Colombia, Nicaragua, and Peru; and additional countries, such as Austria, Australia, and Switzerland. Several other countries, including Argentina, Chile, and India, submitted initial commitments that appear to begin liberalization processes in their VAS markets.

Under the GATS, more than 40 members submitted schedules of initial commitments concerning market access and national treatment to be afforded to foreign VAS suppliers on a most-favored-nation (MFN) basis. These schedules constitute legally binding and enforceable means by which trade in such services is to be conducted. Because domestic VAS service providers need national treatment to be competitive with local service providers in foreign markets, commitments by foreign governments under the GATS provide an opening for U.S. firms to expand trade.

A preliminary assessment by U.S. industry officials of offers pertaining to the VAS sector indicates that major U.S. trading partners generally adopted standstill positions rather than increasing liberalization. Nevertheless, U.S. industry regards the commitments as important by virtue of their legal enforceability. Previously, activities governed by bilateral arrangements were believed to lack an effective enforcement mechanism. Certain differences among member countries' commitments remain. For example, some countries, including U.S. trading partners in the European Union (EU), did not bind future enhanced-telecommunication services, whereas other countries, including the United States, did provide for future services in their schedules.

Given telecommunication's role as an essential input for the conduct of other economic activities in a myriad of service sectors, such as data transmission and enhancement, GATT member countries developed an Annex on Telecommunications under the GATS to interpret the GATS provisions. The GATS, as applied to telecommunications, concerns conditions of access to and use of public telecommunications transport

networks and services (PTTNS). The telecommunications annex states that in applying the transparency provision of the GATS, members shall ensure that information about conditions of access and use be publicly available; these would include tariffs, technical specifications, standards adoption procedures and institutions, terminal equipment attachment rules, and notification, licensing, or registration procedures, if required.⁷

The telecommunications annex further requires members to ensure that foreign service providers from member countries be granted access to and use of PTTNS on a non-discriminatory MFN basis, meaning that all service providers from member countries will be able to access PTTNS under equally favorable terms and conditions. Other provisions instruct members to ensure that the technical requirements of providing services are guaranteed. Key technical requirements concern the ability of service providers to attach equipment to public networks, interconnect leased circuits with public networks, and use protocols of their own choice. The telecommunications annex also establishes rights of service providers to move information within and across borders.

Under the GATS, members retain the right to impose data protection measures regarding the security and confidentiality of messages. Members may also impose restrictions on access and use of PTTNS in order to protect the network and to prevent the offering of services not specified in members' schedule of commitments. Additionally, developing countries are allowed to place conditions on access and use of the PTTNS in order to develop their own telecommunication infrastructures.

Likely Impact on U.S. Trade

The likely net effect of the URA on U.S. trade in value-added services will be modestly beneficial in the long term. Modest to sizeable gains (over 15 percent) in both receipts and payments could accrue from anticipated trade liberalization.

The effect of the URA on U.S. imports of VAS is likely to be negligible. The U.S. market for value-added telecommunication services is already highly liberalized, making it particularly attractive to foreign service providers. U.S. Government policies favoring competitive provision of VAS have been in place for a decade, and more than 40 percent of the world's multinational companies are located in the United States.⁸ Therefore, it is unlikely that the URA will stimulate additional imports of foreign-provided VAS.

Because principal trading partners of the United States have already liberalized their VAS markets, gains in the U.S. trade balance are most likely to result from increased exports to newly liberalized countries, resulting in a modest increase in total U.S. exports. At

⁵ U.S. industry official, U.S. International Trade Commission (USITC) staff telephone interview, Mar. 24, 1994.

⁶ *Ibid.*, p. 29-8.

⁷ GATS, Annex on Telecommunications, p. 37.

⁸ *U.S. Industrial Outlook 1994*, pp. 29-9 and 29-10.

least 13 countries, including the Czech Republic, the Slovak Republic, Hungary, and Romania, with whom the United States has no bilateral VAS agreements in effect, offered relatively liberal commitments to these services. These countries could become increasingly important sources of business for U.S. firms. Increased U.S. trade surpluses in this sector are likely as more developing countries seek to modernize their economies and increase trade by accelerating restructuring of formerly monopolistic telecommunication networks. Such prospects prompted one industry source to forecast future growth in the U.S. trade surplus emanating from certain countries in Asia and Latin America as they become more liberalized.⁹ Additionally, the proliferation of new types of VAS is likely to perpetuate market growth and the U.S. trade surplus.

Likely Impact on U.S. Revenues, Employment, and Consumers

Provisions affecting VAS providers are likely to have a small effect on revenues within the borders of the United States. U.S. firms principally provide value-added services to foreign entities from their overseas facilities.

The URA are likely to result in a small increase in U.S. employment. Domestically, the rate of increase in productivity will continue to exceed the growth rate in employment. In contrast, U.S. trading partners that expand market access for U.S. value-added service providers could benefit considerably from future growth in employment as U.S. firms are established in these markets.

The effect of the URA on domestic consumers of value-added telecommunication services is likely to be positive, but negligible, because the U.S. market is regarded as already fully liberalized and attractive to foreign VAS providers. Domestic and foreign firms have formed alliances to provide an expanding array of low-priced services in the U.S. market.

U.S. Industry Positions on the URA

The Industry Sector Advisory Committee on Services for Trade Policy Matters (ISAC 13) supports Congressional approval of the URA, including the GATS as it pertains to such services as value-added telecommunications.¹⁰ ISAC 13 regards the GATS as

⁹ U.S. industry official, USITC staff telephone interview, Mar. 17, 1994.

¹⁰ *Report of the Industry Sector and Functional Advisory Committees (ISAC/IFAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

another step in the global liberalization of markets, as countries agree to remove restrictions on access to and use of PTNNS by value-added service providers, as well as by intra-corporate telecommunication users. The sector committee regards the number and breadth of commitments received concerning value-added services as reasonably extensive. However, ISAC 13 regrets that U.S. negotiators were unsuccessful in retaining **language in the Annex on Telecommunications** that advocated cost-oriented pricing for telecommunication services, because the sector committee regards such pricing as fundamental to the development of open, competitive, fairly priced value-added service markets worldwide.

The majority of members of the Services Policy Advisory Committee (SPAC) report that the URA merit Congressional approval, because there currently is no alternative to these agreements.¹¹ The SPAC states that GATS provisions on value-added services, combined with liberalized market access commitments from U.S. trading partners, form a good benchmark for further liberalization. However, the committee reports that the failure of U.S. efforts to retain language urging cost-oriented pricing for telecommunication services around the world underscores the continuing practices of U.S. trading partners to use regulatory and statutory schemes that promote above-cost prices in their home markets to subsidize other objectives.

A member of the SPAC¹² states that, while it is gratifying that international service trade will become part of the world's multilateral rule-based trading system, the impact will be diluted significantly because signatories are not required to apply the principles of market access and national treatment to all service sectors and few signatories have voluntarily committed to do so in a way that would extend trade liberalization in services beyond the status quo. The member holds that, as a result, U.S. communication companies will continue to face rules favoring foreign communication providers.

The greatest disappointment to officials of the U.S. telecommunications sector with regard to the outcome of the URA is the necessity to extend multilateral negotiations on basic telecommunication services.¹³ Given the importance of basic telecommunication services to trade in all services, the industry is disappointed about prospects of concluding negotiations and reporting results as late as 1996, as called for in the Ministerial Decision on Negotiations on Basic Telecommunications.

¹¹ *Report of Services Policy Advisory Committee (SPAC) on the Uruguay Round of Multilateral Trade Negotiations*, Jan. 1994.

¹² Matthew J. Stover, President and Chief Executive Officer, NYNEX Information Resources Company, *SPAC report*, app., Jan. 1994.

¹³ *SPAC Report*, Jan. 1994; and U.S. industry official, USITC staff telephone interview, Mar. 24, 1994.

APPENDIX A
REQUEST LETTER

"242_1

: 7ke. eppf.4-7:444.44.

Congress of die Zlinitib fiotates
Mashington. ac 20515

102

March 22, 1994

- The-Honorable bon E. Newquist
Chairman
United States International
Trade Commission
500 "E" Street, S.W.
Washington, D.C. 20436

Dear Mr. Chairman:

As you know, on December 1a, 1993, the President notified the Congress of his intention to enter into trade agreements resulting from the Uruguay Round of Multilateral Trade Negotiations under the General Agreement on Tariffs and Trade (GATT). The Agreements are scheduled to be signed on April 15, 1994.

The GATT Uruguay Round Agreements will have important implications for the U.S. economy overall and a significant impact on individual industrial, agricultural, and service sectors. An understanding of the potential costs and benefits of the Agreements for U.S. producers and workers will be crucial to the consideration of implementing legislation by the Congress.

Consequently, on behalf of the House Committee on Ways and Means and the Senate Committee on Finance, we request under section 332(g) of the Tariff Act of 1930 that you conduct a study consisting of (1) a review and analysis of economy-wide studies of the likely effects of the Uruguay Round Agreements, focusing on the effects on overall U.S. employment, output, and trade flows; and (2) analyses of the impact of both tariff and non-tariff provisions of the GATT Uruguay Round Agreements on important agricultural, industrial, and service sectors of the economy.

The Commission's review and analysis of the economy-wide studies, as well as its sectoral analyses, should include explicit consideration of the likely impact of the Agreements on U.S. production and employment, U.S. consumers, and U.S. exports and imports. The sectoral analyses should be based on the final provisions of the Agreements, including tariff and other market access agreements scheduled to be completed by April 15. The study should focus on those provisions likely to have the most direct and greatest impact on individual sectors.

The Honorable Don E. Newquist
March 22, 1994
Page Two

In light of the need for timely information on the Uruguay Round Agreements as Congressional Committees consider the Agreements and implementing legislation, we would appreciate receiving the study by June 17, 1994. In view of the time constraint and to provide the most useful information, the report should be concise and emphasize important implications rather than be excessively quantitative and detailed.

Thank you for your cooperation.

Sincerely,



Daniel Patrick Moynihan
Chairman
Committee on Finance
United States Senate



Dan Rostenkowski
Chairman
Committee on Ways and Means
U.S. House of Representatives

APPENDIX B
***FEDERAL REGISTER* NOTICE**

BACKGROUND: In their letter dated March 23, 1994, the Committees note that the President notified the Congress on December 15, 1993, of his intention to enter into trade agreements resulting from the Uruguay Round of multilateral trade negotiations under the General Agreement on Tariffs and Trade (GATT).

The Committees asked the Commission to conduct a study under section 332(g) consisting of (1) review and analysis of existing economy-wide studies of the effects of the Uruguay Round, focusing on the effects on overall U.S. employment, output, and trade flows; and (2) analyses of the impact of both tariff and nontariff provisions of the GATT Uruguay Round Agreements on important agricultural, industrial, and service sectors of the economy. Both areas of analysis should include consideration of the likely impact of the Agreements on U.S. production, employment, U.S. consumers, and U.S. exports and imports.

The Committees asked that the analyses be based on the Agreements as concluded to date, not on hypothetical assumptions concerning provisions that are still under negotiation. They also asked that the study focus on those provisions having the greatest impact on individual sectors. More specifically, the Committees asked that the Commission's assessment identify those provisions of the Agreements likely to significantly impact each sector.

The Committees have requested the study by June 17, 1994 and have directed that the report should be concise and emphasize important implications rather than quantitative detail.

WRITTEN SUBMISSIONS: Interested persons are invited to submit written statements concerning the matters to be addressed by the Commission in its report. The Commission is especially interested in receiving information regarding the impact of the GATT Uruguay Round Agreements on individual sector employment, output, and trade flows. A list of the sectors under examination by the Commission is attached. Written submissions should be received no later than noon on May 2, 1994. All submissions should be addressed to the Secretary of the Commission at the Commission's office, 500 E Street, SW., Washington, DC 20436.

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 § 201.6 of the Commission's Rules of Practice and Procedure (19 CFR 201.6). All written submissions, except for confidential business information, will be made available for inspection by interested persons.

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.

By order of the Commission.

Issued: March 25, 1994.

Donna R. Koehnke,
Secretary.

Attachment

Industry Sectors

Agriculture, Fisheries, and Forestry Sectors

Livestock and meat

Poultry and eggs

Dairy

Fish

Sugar and other sweeteners

Fruit and vegetables

Grain, milled grain, and animal feed

Oilseed and oilseed products

Alcoholic beverages

Tobacco and tobacco products

Tropical and specialty agricultural products

Wood and lumber products

Paper, pulp, and printed matter

Cotton

Industrial Sectors

Energy and Chemicals

Energy and related products

Primary aromatic chemicals and olefins

Agricultural chemicals

Miscellaneous finished chemical products

Pharmaceuticals

Rubber, plastics, and products thereof

Miscellaneous chemicals

Textiles, Apparel, and Footwear

Textiles

Apparel

Footwear

Minerals and Metals

Non-ferrous metals and products

Flat glass, fiber glass, and miscellaneous glass products

Industrial and household ceramics

Non-metallic industrial minerals

Steelmaking raw materials

Basic iron and steel products

Fabricated metal products

Machinery and Transportation

Motor vehicles

INTERNATIONAL TRADE COMMISSION

[investigation No. 332-453]

Potential Impact on the U.S. Economy and Industries of the GATT Uruguay Round Agreements

AGENCY: International Trade Commission.

ACTION: Institution of investigation and call for public submissions.

EFFECTIVE DATE: March 25, 1994.

SUMMARY: Following receipt on March 23, 1994, of a request from the House Committee on Ways and Means and the Senate Committee on Finance, the Commission instituted investigation No. 332-353. Potential Impact on the U.S. Economy and Industries of the GATT Uruguay Agreements, under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)).

FOR FURTHER INFORMATION CONTACT: Information on industry sectors may be obtained from Karen Laney-Cummings, Office of Industries (202-205-3443) or Mark Estes, Office of Industries (202-205-3491); economic aspects, from Hugh Arce, Office of Economics (202-205-3234); and legal aspects, from William Gearhart, Office of the General Counsel (202-205-3091). The media should contact Margaret O'Laughlin, Director, Office of Public Affairs (202-205-1819). Hearing impaired individuals are advised that information on this matter can be obtained by contacting the TDD terminal on 202-205-1107.

Motor vehicle parts
Aerospace equipment and parts
Certain transportation equipment
Metal wood working equipment
Industrial machinery
Electrical equipment and components
Appliances
Miscellaneous equipment

Electronics

Computers and office equipment
Telephone and telegraph apparatus and
optical cable
Consumer electronic products
Recorded media
Semiconductors, and other electronic
components
Instruments
Medical equipment
Photographic and optical equipment
and materials

Miscellaneous manufactures

Silverware, flatware, and jewelry
Dolls, toys, games, sporting goods,
bicycles, and musical instruments
Luggage, handbags, and flatgoods
Furniture and lamps
Miscellaneous manufactured articles

Service Sectors i

Audio visual

Business and professional (including
advertising, accounting, architecture
and engineering, consulting, and legal
services)

Construction

Tourism

Value-added telecommunications

OM Dec. 94-7606 Filed 3-30-94: 9:45 erni

IIUJNO coot 7020-02-•

I The Maritime, Financial, and Basic
Telecommunications sectors are 'abaci to further
neva tenons and tbenrionr not to covered In
deutt>

APPENDIX C
LIST OF INDUSTRY SECTORS

LIST OF INDUSTRY SECTORS

Agriculture, Fishery, and Forestry Sectors

- Livestock and meat
- Poultry and eggs
- Dairy
- Fish
- Sugar, other sweeteners, and ethanol
- Fruit and vegetable products
- Grain, milled grain, and animal feed
- Oilseed and oilseed products
- Beverages
- Tobacco and tobacco products
- Tropical and specialty agricultural products
- Wood and lumber products
- Paper, pulp, and printed matter
- Cotton

Industrial Sectors

Energy and Chemicals

- Energy and related products
- Primary aromatic chemicals and olefins
- Agricultural chemicals
- Miscellaneous finished chemical products
- Pharmaceuticals
- Rubber, plastics, and products thereof
- Miscellaneous chemicals

Textile, Apparel, and Footwear

- Textiles
- Apparel
- Footwear

Minerals and Metals

- Nonferrous minerals, metals, and related products
- Flat glass, fiberglass, and miscellaneous glass products
- Industrial and household ceramics
- Non-metallic industrial minerals
- Steelmaking raw materials
- Basic iron and steel products
- Fabricated metal products

Machinery and Transportation

- Motor vehicles
- Motor vehicle parts
- Aerospace equipment and parts
- Certain transportation equipment
- Metal and wood working equipment
- Industrial machinery
- Electrical equipment and components
- Appliances
- Miscellaneous equipment

Electronics

- Computers and office equipment
- Telephone and telegraph apparatus and optical cable
- Consumer electronics
- Recorded media
- Semiconductors and other electronic components
- Instruments
- Medical equipment
- Photographic and optical equipment and materials

Industrial Sectors—Continued

Miscellaneous Manufactures

- Silverware, flatware, and jewelry
- Recreational goods
- Luggage, handbags, and flat goods
- Furniture and lamps
- Miscellaneous manufactured articles

Service Sectors¹

- Audiovisual services
- Business and professional services (including advertising, accounting, consulting, and legal services)
- Architectural, engineering, and construction (AEC) services
- Tourism services
- Value-added telecommunication services

¹ The Maritime, Financial, and Basic Telecommunications sectors are subject to further negotiations and therefore will not be covered in detail.

APPENDIX D
LIST OF SUBMISSIONS

LIST OF SUBMISSIONS

Agriculture, Fisheries, and Forestry Sectors:

American Dehydrated Onion and Garlic Association
Irene Ringwood, Bogle & Gates, counsel

American Forest & Paper Association
Maureen R. Smith, International Vice President
Stephen M. Lovett, International Vice President

American Peanut Shellers Association, Inc.
Evans J. Plowden, Jr., Watson, Spence, Lowe and Chambless,
counsel

American Sheep Industry Association
Peter Orwick, Director of Government Affairs and Natural
Resources

California Cling Peach Advisory Board
Thomas P. Krugman, General Manager

Floral Trade Council
Timothy J. Haley, President

Florida Fruit & Vegetable Association
Michael J. Stuart, Executive Vice President

Florsheim Shoe Company
Stephen P. Sonnenberg, Sonnenberg, Anderson & Rodriguez,
counsel

International Apple Institute
A. Ellen Terpstra

National Grain & Feed Association
Todd E. Kemp, Director of Legislative Affairs

New Zealand Dairy Board
Edward J. Farrel, Bronz & Farrell, counsel

New Zealand Meat Producers Board
Edward J. Farrell, Bronz & Farrell, counsel

Sweetener Users Association
Thomas A. Hammer, President

Wine Institute
James B. Clawson

Energy and Chemicals Sectors:

Albemarle Corporation
Max Turnipseed, Director, International Trade and Regulatory Affairs
Chemical Industry Trade Advisor
W.H. Clark, Chairman, Nalco Chemical Company

Chemical Manufacturers Association
Timothy F. Burns, Vice President, Federal Government Relations

Gelatin Manufacturers Institute of America
Mario Diaz-Cruz, III

Hunt Consulting
Milt Hunt

Pharmaceutical Manufacturers Association
Gerald J. Mossinghoff, President

Rubber Manufacturers Association
Peter J. Pantuso, Vice President - Public Affairs

Textiles, Apparel, and Footwear Sectors:

American Apparel Contractors Association
American Textile Manufacturers Institute
Carlos Moore, Executive Vice President
Atlantic Apparel Contractors Association
Florsheim Shoe Company
Stephen P. Sonnenberg, Sonnenberg, Anderson & Rodriguez, counsel
National Knitwear and Sportswear Association
National Retail Federation
Robert P. Hall **III**, Vice President
Rubber Manufacturers Association
Peter J. Pantuso, Vice President - Public Affairs
South East Apparel Manufacturers and Suppliers Association
Seth M. Bodner, Executive Director, National Knitwear and Sportswear
Association
Spyder Active Sports, Inc.
David L. Jacobs, President

Minerals and Metals Sectors:

Aluminum Association Inc.
M. Barry Meyer, Vice President, Government Affairs & Associate General
Counsel
Cold Finished Steel Bar Institute
Murray J. Belman & Duane W. Layton, Thompson & Mitchell, counsel
Ferroalloys Association
Edward J. Kinghorn, Jr., President
Independent Zinc Alloyers Association
R.M. Cooperman, Executive Director
PPG Industries, Glass Group
Terence P. Stewart, Stewart & Stewart, special counsel
Specialty Steel Industry of the United States Specialty Tubing Group
Collier, Shannon, Rill & Scott, counsel
Tile Council of America, Inc.
John F. Bruce & John C. Pierce, Howry & Simon, counsel
Dr. Mark Gluek, Capital Economics, Inc., economic counsel
Wire Reinforcement Institute
Terri Mawson, Membership Director

Machinery and Transportation Sectors:

Aerospace Industries Association
Air-Conditioning & Refrigeration Institute (ARI)
Renee S. Hancher, Director of International Trade
American Textile Machinery Association (ATMA)
William W. Scott & Michael R. Kershow, Counsel to the ATMA
Association for Manufacturing Technology
James H. Mack, Vice President Government Relations
Dana Corporation
Edward McNeal, Director, Government Relations
Motor and Equipment Manufacturers Association
Christopher M. Bates, Director, International Trade & OE Suppliers
Division
Steel Heddle Manufacturing Co.
TRW Inc.
Michael T. Schilling, Director Government Relations-International

Electronics Sectors:

Zenith Electronics Corporation
Jerry K. Pearlman, Chairman, Chief Executive Officer
Motion Picture Export Association of America, Inc. (MPEAA)
Bonnie J.K. Richardson, Director, Federal Affairs
Semiconductor Industry Association

Miscellaneous Manufactures Sectors:

Alexander Doll Company, Inc.
Ira N. Smith, Chief Executive Officer
Amalgamated Industrial and Toy & Novelty Workers of America
Local 223 — AFL-CIO
Rocco Miranti, Manager
Ethan Allen, Inc.
M. Farooq Kathwari, Chairman and President
Eugene Doll Co., Inc.
Michael L. Pietrafesa, Executive Vice President
Goldberger Doll Manufacturing Co., Inc.
Lawrence Doppelt, Vice President
Mattel, Inc.
Thomas F. St. Maxens, St. Maxens & Company

Services Sectors:

Motion Picture Export Association of America, Inc. (MPEAA)
Bonnie J.K. Richardson, Director, Federal Affairs

Non-Sector Specific:

International Intellectual Property Alliance
Eric H. Smith, Executive Director and General Counsel
Emergency Committee for American Trade (ECAT)

APPENDIX E
METHODOLOGY FOR SECTOR
LEVEL ANALYSIS

METHODOLOGY FOR SECTOR-LEVEL ANALYSIS

This appendix describes in detail the methodology used in the Commission's sector-level analyses of the GATT Uruguay Round Agreements (URA). The Commission's sector-level analysis focuses on the likely impact of the URA on U.S. consumers and trade, production, and employment in 58 sectors. The Commission examined all of the agreements and identified those that likely would have a significant economic impact on each sector. In assessing the impact of the URA at the sector level, the Commission used both quantitative and qualitative analyses.

Quantitative Analysis

The quantitative analysis is based on a partial equilibrium framework in which products from the United States, other GATT countries, and non-GATT countries are treated as imperfect substitutes in markets in both the United States and other GATT countries. The effects of the URA are analyzed in two separate simulations. The first simulation focuses on changes in the U.S. market, while the second focuses on changes in other GATT-country markets. In the second simulation, other GATT countries are treated as a single GATT market.

The first step is the reduction of U.S. tariffs and the tariff equivalents for U.S. nontariff barriers (NTBs) facing GATT and non-GATT sources of imports. All other factors are held constant, including tariffs and NTBs in other GATT countries. This simulation provides estimates of the expected decline in U.S. shipments and employment. In addition it provides the potential increase in GATT and non-GATT imports into the U.S. market and the price reduction to U.S. consumers for these imports.

In the second step, a similar exercise is conducted, whereby tariffs and the tariff equivalents for NTBs of GATT-member countries are reduced while holding all other factors constant, including U.S. tariffs and NTBs. The sectoral model then calculates estimates of the expected increase in United States production and employment and subsequent exports to the GATT market. For both simulations, adjustments are defined as those that would occur after the complete phase-in of the URA.

In the model for the first simulation, U.S. domestic output and imports from other-GATT and non-GATT countries are considered imperfect substitutes for each other in U.S. domestic demand. Therefore, each of these products has a separate market in which equilibrium prices and quantities are established. The market for each of the three products is depicted by the following log-linear, constant-elasticity, demand and supply system,

$$(1) \quad \ln(Q_i) = \ln(k_i) + \theta \ln(P_i) + E_{i,j} \quad ; \#1$$

$$(2) \quad \ln(Q_i) = E_i \ln(P_i)$$

The subscripts i and j are equal to 1, 2, and 3, and refer to the U.S. domestic product and GATT and non-GATT imports, respectively. Equation (1) represents demand while equation (2) represents supply for all three products. Q_i and P_i are the equilibrium quantities and prices for each of the three products. $E_{i,j}$ is the uncompensated own-price demand elasticity for good i while E_i is the uncompensated elasticity of demand for good i with respect to price j . c_i is the elasticity of supply for each of the three products. lc_i is a constant term.

¹ The imperfect-substitutes assumption is common in applied research in international trade. See P.S. Armington, "A Theory of Demand for Products Distinguished by Place of Production," *IMF Staff Papers*, Mar. 1969; and U.S. International Trade Commission (USITC), *The Economic Effects of Significant U.S. Import Restraints, Phase I: Manufacturing* (investigation No. 332-262), USITC publication 2222, Oct. 1989.

In this first partial equilibrium model, the elimination of U.S. import restraints on GATT and non-GATT goods results in a reduction in the price paid by U.S. consumers for both types of goods. As a result, consumers purchase more of both types of imported goods, and the demand faced by producers of imperfectly substitutable U.S. products declines. U.S. suppliers respond to the reduction in demand by lowering both production and prices. The magnitude of the effect of trade liberalization on U.S. import prices and imports of GATT and non-GATT goods is a function of the size of the tariff reduction,² the import demand and supply elasticities, and the cross-price elasticities between all three products. Similarly, the magnitude of the effect on the price and production of the U.S. domestic product is a function of changes in the import price, the U.S. demand and supply elasticities, and the cross-price elasticity between all three products. The cross-price elasticity, in turn, will depend on the elasticities of substitution between all three products and the U.S. market share of imports from both GATT and non-GATT sources. In addition, the effect of liberalization on U.S. employment is estimated. Employment changes in the U.S. sector are a function of the change in U.S. domestic output.³

The model for the second simulation follows a similar approach. U.S. exports and GATT and non-GATT products are considered imperfect substitutes for each other in GATT-market demand. The GATT market for all three products is depicted by the following log-linear, constant-elasticity, demand and supply system,

$$(3) \quad \ln(Q_i) = \ln(k_i) + \theta \ln(P_i) + \sum_j \alpha_{ij} \ln(P_j)$$

$$(4) \quad \ln(Q) = \sum_i \epsilon_i \ln(P_i)$$

The equations are similar to (1) and (2) except that, in this second case, the subscripts i and j are equal to 1, 2, and 3 and refer to GATT production consumed within the GATT-market,⁴ and U.S. and non-GATT exports to the GATT-market, respectively. Equation (3) gives demand, while equation (4) gives supply for all three products. Q_i and P_i are the equilibrium quantities and prices for each of the three products in the GATT market. Similar to equations (1) and (2), α_{ii} is the uncompensated own-price demand elasticity for good i while α_{ij} is the uncompensated elasticity of demand for good i with respect to price j . ϵ_i is the elasticity of supply for each of the three products. k_i is a constant term.

In this second model, the elimination of GATT import restraints on U.S. products⁵ results in an increase in the supply of U.S. exports to the GATT market and a decrease in the price paid by GATT-market consumers for U.S. goods. Even though results also are calculated for both GATT and non-GATT products, the primary focus of the second simulation is on the effects of the URA on U.S. exports to the GATT market. The magnitude of the effect of trade liberalization by other GATT countries on U.S. export prices and quantities is a function of the size of the tariff reduction;⁶ the U.S. export demand and supply elasticities, and the U.S. share of the GATT market.

² In the case of nontariff barriers (NTBs), the price and quantity effects will be a function of the change in the size of the tariff equivalent as well as the tariff reduction. As noted in chapter 1, significant NTBs in the U.S. market occur mainly in the textile and apparel sector and various agricultural sectors. In the case of the agricultural sectors, quota liberalizations apply to both GATT and non-GATT countries. However, in the case of the textile and apparel sector, quota liberalizations apply only to GATT signatories.

³ This assumes that changes in employment are proportionately related to changes in output. This assumption may overstate employment changes in the agricultural sector, inasmuch as this sector has a considerable amount of fixed resources, such as farm labor and land, that can be used to produce additional output without hiring additional labor.

⁴ This is analogous to the U.S. domestic product in equations (1) and (2).

⁵ Unlike the United States, many GATT signatories will not unilaterally apply tariff concessions made under the Uruguay Round Agreements (URA) to non-GATT countries. A precise catalog of each GATT-signatory's treatment for non-GATT countries was not possible, given the time constraints of this study. Consequently, in the second simulation, GATT-market tariffs and NTBs were removed only on U.S. products. In those sectors where non-GATT countries receive URA concessions, this assumption will tend to overstate the increase in U.S. exports to the GATT market. The average, trade-weighted offers for a minimum of three large, GATT-member consumers of U.S. exports in each sector were used to estimate the effects on U.S. exports.

⁶ In the case of NTBs, the price and quantity effects will be a function of the change in the size of the tariff equivalent as well as the tariff reduction.

These partial equilibrium models employ data on production, consumption, and trade as well as estimates of market behavior parameters (substitution, demand, and supply elasticities). In most cases, production, consumption, and trade data were obtained primarily from foreign government, U.S. Government, and domestic industry sources. The market behavior parameters were obtained from a number of secondary sources, as well as from research conducted by staff in previous studies.⁷ Upper bound estimates of supply elasticities and substitution elasticities were selected to obtain upper bound estimates of changes in equilibrium quantities.

Trade-weighted U.S. tariff reductions were calculated in the following manner: ad valorem equivalent (AVE)⁸ base and current offer rates were used to derive calculated duties for each 1993 HTS subheading by multiplying each AVE times the dutiable value of 1993 imports under the HTS subheading.⁹ The resulting calculated duties were totaled separately for base and offer rates and divided by the sum of the dutiable imports under each HTS subheading plus the total imports under any subheading for which the column 1, most-favored-nation (MFN) rate of duty rate was already duty-free for each sector or product group. The resulting trade weighted offer AVE was then subtracted from the trade-weighted base AVE to show the trade-weighted tariff reduction for use in the Commission's sectoral model on U.S. imports. Note that these calculations were made using MFN imports except those from Canada and Mexico, in order to exclude the effects of reductions in U.S. tariffs on imports from those countries under the North American Free Trade Agreement."¹

It should also be noted that these calculations do not take into account any other special U.S. tariff provisions, such as duty-free entry under the Generalized System of Preferences, the Israel Free-Trade Agreement, the Caribbean Basin Economic Recovery Act, the Automotive Agreement, the Civil Aircraft Agreement, or the Florence Agreement. Those cases where the effect of the URA would be lessened because a significant amount of imports are already entering duty-free under one or more of these provisions are discussed in the appropriate sector write-ups. Also noted in the sector write-ups are any product groups or industries likely to experience an effect different from the overall sector effect.

The reader should keep in mind that performing the exercise in these two steps has certain limitations. The models in this analysis assume imperfect substitutes and constant-elasticity demand and supply curves and, therefore, preclude complete specialization in one product by any GATT country after liberalization." Moreover, in the second simulation, GATT tariffs and NTBs facing U.S. exports are removed. Because other GATT countries are treated as a single market, the simulation does not capture the effects that will result from the removal of border measures between other GATT countries. Consequently, only U.S. exporters are assumed to gain market share after tariff and NTB reductions. If each of the GATT-country markets had been modeled separately to include the reduction of trade barriers between them, then the estimated U.S. price decline relative to GATT trade prices would have been much smaller after liberalization. This assumption and the assumption of holding tariffs and NTBs constant will tend to overstate the results estimated from the model used in this analysis.

In other aspects, the models tend to understate effects. In this analysis, net effects on U.S. trade, production, and employment are calculated from estimates of the two separate simulations. Because the net results are based on the sum of two separately-derived, partial-equilibrium estimates rather than

⁷ See U.S. Department of Agriculture, Economic Research Service, *A 1989 Global Database for the Static World Policy Simulation (SWOPSIM) Modeling*, prepared by John Sullivan, Vernon Roningen, Susan Leetmaa, and Denise Gray, staff report No. AGES 9215, May 1992; USITC, *Economic Effects of U.S. Import Restraints*, USITC publication 2222, Oct. 1989; C.R. Shiells, R.M. Stern, and A.V. Deardorff, "Estimates of the Elasticities of Substitution between Imports and Home Goods for the United States," *Weltwirtschaftliches Archiv*, 122 (3), 1986, pp. 497-519; and Kenneth A. Reinert and David W. Roland-Holst, "Parameter Estimates for U.S. Trade-Policy Analysis," working paper, USITC, Apr. 1991.

⁸U.S. industrial offers were provided as ad valorem equivalents (AVEs). For those agricultural base and offer rates that consisted of specific or compound rates of duty, AVEs were calculated using 1993 dutiable imports. Final U.S. offers made as of Apr. 15, 1994, were used. Foreign offers as of Feb. 15, 1994 were used; foreign tariff reductions were updated as revised foreign offers were received through Apr. 15, 1994.

⁹As discussed in ch. 1, all duty and NTB reductions that were used in the sectoral analyses were based on the latest duty offers available at the time that this report was prepared.

mln a few of the agricultural sectors, the URA contains some concessions made by the United States and Canada that conflict with concessions made under the North American Free-Trade Agreement (NAFTA). An attempt to reconcile these differences has rendered, in some instances, disparate interpretations of the two agreements by both countries. These disagreements, which are currently being mediated, are discussed in further detail in their respective chapters.

¹Models allowing complete specialization would have provided larger upper bound estimates. However, complete specialization is rarely observed for most industries.

estimated from a single integrated model, the supply linkages between the U.S. import and export sectors as well as the supply linkages between GATT import and export sectors are not accounted for in the estimated results. This aspect of the partial-equilibrium analysis tends to understate the resulting change in trade flows as suppliers in both the United States and other GATT markets shift additional resources from the import to the export sector. In general, it is not possible to predict the bias in net changes to trade, production, and employment without further information about the U.S. and GATT-country markets, such as the relative change in trade-barriers and production possibility functions. The sum of estimates of the net effects from the two models will tend to have greater uncertainty than the estimates provided by either simulations alone.¹²

Sector-level models do not capture many of the likely indirect effects of the URA, such as changes in income in both the United States and the rest of the world.¹³ The models also do not capture the effects resulting from economies of scale, stronger trading rules and procedures, or the long-run effects on investment and growth.¹⁴ In addition, other important factors of the URA, such as improvements in intellectual property rights protection and certain provisions relating to changes in internal support programs for some agricultural sectors, were too complex to be adequately captured by the partial equilibrium model. Therefore, a qualitative assessment, described below, was made in addition to or in lieu of the quantitative model estimates in those sectors where such special factors were deemed important.

Qualitative Analysis

The Commission's qualitative analysis was based on extensive interviews with experts in trade, industry, government, and academia; written submissions received by the Commission; and Commission staff expertise. Commission estimates utilize the indicators "negligible," "small," "modest," and "sizeable" to characterize the likely impact of the URA on U.S. trade, production, and employment. These indicators are based on both qualitative assessments and quantitative analysis, and therefore they should be used merely as benchmarks rather than as precise measures of the likely impact of the URA on individual sectors. These indicators are defined below:

negligible	a change of 1 percent or less;
small	a change of over 1 percent to 5 percent;
modest	a change of over 5 percent to 15 percent; and
sizeable	a change of over 15 percent.

¹² For further discussion on this point, see ch. 4 of USITC, *The Likely Impact on the United States of a Free Trade Agreement with Mexico* (investigation No. 332-297), USITC publication 2353, Feb. 1991.

¹³ However, some of these indirect effects are incorporated into the CGE models reviewed in ch. 2.

¹⁴ See Joseph Francois, Bradley McDonald, and Hakan Nordstrom, "Economywide Effects of the Uruguay Round," GATT background paper, Dec. 3, 1993.

