

# CONTENTS

Acknowledgments	xiii
Contributors	xv
Abbreviations and Acronyms	xvii
<b>Part I SETTING THE SCENE</b>	
1 Agriculture, Trade Reform, and the Doha Agenda <i>Kym Anderson and Will Martin</i>	3
2 What Is at Stake: The Relative Importance of Import Barriers, Export Subsidies, and Domestic Support <i>Thomas W. Hertel and Roman Keeney</i>	37
3 Special and Differential Treatment for Developing Countries <i>Tim Josling</i>	63
<b>Part II AGRICULTURAL MARKET ACCESS</b>	
4 Consequences of Alternative Formulas for Agricultural Tariff Cuts <i>Sébastien Jean, David Laborde, and Will Martin</i>	81
5 Reducing Tariffs Versus Expanding Tariff Rate Quotas <i>Harry de Gorter and Erika Kliauga</i>	117
6 Is Erosion of Tariff Preferences a Serious Concern? <i>Antoine Bouët, Lionel Fontagné, and Sébastien Jean</i>	161

**Part III EXPORT SUBSIDIES AND DOMESTIC SUPPORT**

<b>7</b>	<b>Removing the Exception of Agricultural Export Subsidies</b>	<b>195</b>
	<i>Bernard Hoekman and Patrick Messerlin</i>	
<b>8</b>	<b>Rethinking Agricultural Domestic Support under the World Trade Organization</b>	<b>221</b>
	<i>Chad E. Hart and John C. Beghin</i>	
<b>9</b>	<b>Consequences of Reducing Limits on Aggregate Measurements of Support</b>	<b>245</b>
	<i>Hans G. Jensen and Henrik Zobbe</i>	
<b>10</b>	<b>Reducing Cotton Subsidies: The DDA Cotton Initiative</b>	<b>271</b>
	<i>Daniel A. Sumner</i>	

**Part IV DOHA REFORM SCENARIOS**

<b>11</b>	<b>Holograms and Ghosts: New and Old Ideas for Agricultural Policies</b>	<b>295</b>
	<i>David Orden and Eugenio Díaz-Bonilla</i>	
<b>12</b>	<b>Market and Welfare Implications of Doha Reform Scenarios</b>	<b>333</b>
	<i>Kym Anderson, Will Martin, and Dominique van der Mensbrugge</i>	
	<b>Index</b>	<b>401</b>

**Figures**

1.1	The Declining Share of Agriculture and Food in Merchandise Exports for World and Developing Countries, 1970–2003	4
1.2	Agricultural Producer Support in High-Income Economies, by Value, Percent, and Type of Support, 1986–2003	7
1.3	Agricultural Producer Support in High-Income Economies, by Country, 1986–2003	8
2.1	Welfare Gains for Developing Countries from Freeing Trade in Services and from Trade Facilitation Compared with the Standard Removal of Merchandise Tariffs and Subsidies	55
4.1	Converting the Harbinson Formula into a Tiered Formula	85
4.2	A Tiered Tariff-Cutting Formula without Discontinuities	86
5.1	In-Quota Imports with and without Quota Fill	124
5.2	Imports with Quota Full or Underfilled	125
5.3	Out-of-Quota Imports with and without Quota Fill	126

5.4	Overquota Imports	127
6.1	European Union Trade Policy, 2004	166
6.2	U.S. Trade Policy, 2004	167
7.1	The Incidence of All Notified Export Subsidies	202
7.2	The Incidence of Quad Export Subsidy Commitments	203

## Tables

1.1	Import-Weighted Average Applied Import Tariffs, by Sector and Region, 2001	5
1.2	Import-Weighted Average Agricultural Import Tariffs, by Region, 2001	6
1.3	Effects on Economic Welfare of Full Trade Liberalization by Economy and Products, 2015	12
1.4	Distribution of Global Welfare Impacts from Removing All Agricultural Tariffs and Subsidies, 2001	13
1.5	Welfare Effect of Alternative Doha Reform Scenarios, 2015	14
1.6	Effects on Bilateral Merchandise Trade Flows of Adding Nonagricultural Tariff Cuts to Agricultural Reform under Doha, 2015	16
1.7	Annual Average Growth in Output and Employment from a Comprehensive Doha Reform as Compared with the Baseline Rate, by Region, 2005–15	18
1.8	Decreases in the Number of Impoverished under Full Trade Liberalization and Alternative Doha Scenarios, 2015	19
2.1	Modeled Regions by Type of Economy	41
2.2	Agricultural Domestic Support in Selected High-Income Economies	42
2.3	Average Applied Import Tariffs, by Sector and Region, 2001	43
2.4	Average Import Tariffs in Developing Countries	45
2.5	Percentage Change in Developing-Country Imports from Removing All Tariffs and Agricultural Subsidies	46
2.6	Percentage (and Volume) Change in Developing-Country Exports from Removing All Tariffs and Agricultural Subsidies	48
2.7	Regional Welfare Effects of Removing All Agricultural Tariffs and Subsidies	49
2.8	Developing Countries' Welfare Gains from Removing All Agricultural Tariffs and Subsidies	52
2.9	Developing Countries' Welfare Gains from Removing All Nonagricultural Tariffs, Agricultural Assistance, and Merchandise Trade Distortions	54
2.10	Welfare Effects of Liberalizing All Merchandise Trade	56
2.11	Welfare Decomposition from Merchandise Trade Liberalization for Developing Countries	58

3.1	Flexibility for Developing Countries in the URAA	69
3.2	Categories of Special and Differential Treatment in Agriculture in the July Framework Agreement	71
4.1	Key Features of Applied Agricultural Tariffs, by Selected Countries and Regions, 2001	89
4.2	Bound and Applied Agricultural Tariff Rates, by Selected Countries and Regions, 2001	91
4.3	Summary Description of the Agricultural Reform Scenarios	93
4.4	Base Level and Reductions in Average Bound Duties, by Agricultural Reform Scenario	96
4.5	Reductions in Base Tariffs for Average Applied Tariffs, by Agricultural Reform Scenario	98
4.6	Cross-Product Coefficient of Variation of the Power of MFN Tariffs: Base and Reduction by Agricultural Reform Scenario	100
4.7	Implications of Alternative Formulas for Market Access, Base Tariffs, and Reductions by Agricultural Reform Scenario	106
4.8	Implications of Alternative Scenarios for Protection by Commodity: Reductions in Global Average Tariff	110
5.1	Value of Production for TRQ versus Non-TRQ Commodities in OECD Countries, 2000	120
5.2	Value of Trade for TRQ versus Non-TRQ Commodities in OECD Countries, 2000	122
5.3	Value of Trade by Regime	128
5.4	Effects of Trade Liberalization on Value of Trade	130
5.5	Estimates of Water in the Tariff for Selected TRQs	132
5.6	Value of In-Quota Trade and Fill Rates by TRQ Administration Method	138
5.7	Value of In-Quota Trade and Fill Rates by TRQ Additional Regulation	140
5.8	Fill Rate by Administration Method and Additional Regulation	142
5.9	Value of TRQ Trade by Economy	144
5.10	Value of Trade by Commodity	148
5.11	Changes in Administration Methods	153
5.12	STE, Domestic Policy Responses, and Rice Tariff Quota in Japan	156
6.1	Decomposition of the Average Duty Faced by Each Exporting Country, 2001	168
6.2	Average World Applied and MFN Tariff Protection Rates, 2001	171
6.3	Average True Preferential Margin by Country, by Sector and Commodity	173

6.4	Simulation of the Impact of a Proportional Cut in Bound Duties under Scenarios 1 and 2	175
6.5	TRQ Rents Received by Developing Country, in 2001 and after Scenarios 1 and 2	177
6.6	Sectoral and Geographical Breakdown in the Simulation Exercise	180
6.7	Simulated Impact of Two Alternative Agricultural Tariff Cut Scenarios on World Trade and Welfare	182
6.8	Simulated Impact of Two Alternative Agricultural Tariff Cut Scenarios on International Prices of Developing-Country Exports	183
6.9	Simulated Impact of Scenario 1 on Welfare, Terms of Trade, and Returns to Land, by Region	184
6.10	Detailed Impact of Two Tariff-Cutting Scenarios on Selected Sub-Saharan Countries	185
7.1	WTO Commitments and Notifications of Used Export Subsidies, 1995–2000	198
7.2	WTO Commitments and Notifications of the EU, by Product, 1995–2000	204
7.3	Export Subsidy Rates for Selected WTO Members, by Commodity	206
7.4	EU Export Subsidies and OECD PSEs, 1996–2002	208
7.5	EAGGF Subsidies by Commodity, 1995–2002	210
7.6	EAGGF Export Subsidies as a Share of All Subsidies, 1995–2002	213
7.7	EU Subsidization Rates (Relative to Value of Production), 1995–2002	214
7.8	EAGGF Refunds as a Percentage of EU Farm Exports, 1995–2002	216
7.9	Export Subsidy Equivalents for Major Users	217
8.1	Reported Domestic Support from the United States, 1995–2001	226
8.2	Reported Domestic Support from the European Union, 1995–2000	227
8.3	Reported Domestic Support from Japan, 1995–2000	228
8.4	Reported Domestic Support from Brazil, 1995–98	228
8.5	Market Price Support as a Percentage of Reported AMS, 1995–2001	231
8.6	U.S. Sugar Program AMS Calculations with External Reference Prices, 1995–2001	232
8.7	U.S. Sugar Program AMS Calculations with Actual World Prices, 1995–2001	233
8.8	U.S. Sugar Program AMS Calculations with Actual Domestic and World Prices, 1995–2001	233

9.1	Current Total AMS, 1999, by Country and Commodity	248
9.2	Payments Not Included in Current Total AMS Due to de Minimis, 1999, by Country and Commodity	250
9.3	EU15 AMS Notifications, by Commodity, 2000/01	252
9.4	United States AMS Notifications, by Commodity, 2001	253
9.5	Domestic Support Base Levels, New Commitments, and Latest WTO Notifications	254
9.6	Domestic Support Reductions Needed	260
9.7	Agenda 2000 and MTR Intervention Price Reduction	261
9.8	EU15 AMS Adjusted for Intervention Price Changes	262
9.9	U.S. AMS Adjusted for Administered Dairy Price and Market Loss Assistance Payments	263
9A.1	Domestic Support Reductions for Selected Countries	265
11.1	Alternative Reform Strategies	299
11.2	Value of the U.S. Peanut and Tobacco Buyouts	303
11.3	Cost of Possible Buyouts of the Main U.S. 2002 Farm Bill Support Payments	308
11.4	Average Tariff Protection Applied, by Economy or Region, Early 2000s	320
12.1	Effects of a Tiered Formula Cut in Agricultural Domestic Support, 2001	339
12.2	Import-Weighted Average Applied Tariffs, by Sector and Region, 2001	343
12.3	Import-Weighted Average Applied Tariffs, by Sector and Country, 2005	345
12.4	Impacts on Real Income from Full Liberalization of Global Merchandise Trade, by Country or Region, 2015	346
12.5	Impacts on Selected Trade Indicators from Full Liberalization of Global Merchandise Trade, 2015	347
12.6	Regional and Sectoral Sources of Gains from Full Liberalization of Global Merchandise Trade, 2015	349
12.7	Change in Developing Countries' Shares of Global Output and Exports under Full Global Merchandise Trade Liberalization, by Sector, 2015	349
12.8	Impacts of Full Global Trade Liberalization on Agricultural and Food Output and Trade, by Country/Region, 2015	351
12.9	Impact of Full Liberalization of Global Merchandise Trade on Self-Sufficiency in Food and Agricultural Products, Selected Regions, 2015	354
12.10	Impacts of Full Global Merchandise Trade Liberalization on Real Factor Prices, 2015	356
12.11	Impact of Full and Partial Liberalization on Agricultural Value Added, 2015	358

12.12	Summary of Doha Partial Liberalization Scenarios Considered	360
12.13	Average Applied Tariffs for All Goods by Country/Region, for 2001 and 2015 Baselines and Doha Scenarios by 2015	362
12.14	Change from Baseline in Real Income under Alternative Doha Scenarios, 2015	370
12.15	Welfare Effect of Retaining Agricultural Export and Domestic Subsidies, 2015	374
12.16	Changes from Baseline in Bilateral Trade Flows from Full Global Liberalization and from Doha Scenario 7, 2015	377
12.17	Average Annual Agricultural Output and Employment Growth under Alternative Scenarios, 2005–15	378
12.18	Share of Agricultural and Food Production Exported, by Country or Region under Alternative Scenarios, 2001 and 2015	380
12.19	Changes in Poverty under Alternative Scenarios, 2015	382
12.20	Impacts on Real Income from Full Liberalization of Global Merchandise Trade with and without Endogenous Productivity Growth, 2015	384
12A.1	Applied Tariffs by Sector for Selected Importing Regions, GTAP 6.05 (2001) Compared with GTAP5 (1997)	388
12A.2	Global Average Top-Level Armington Elasticities in the GTAP-AGR and LINKAGE Models, by Product	392
12A.3	Comparison of Base Case in 2015 versus Comparative Static Cases in 2001 for the Effects on Real Incomes of Full Liberalization of Global Merchandise Trade, by Country or Region	393