ad valorem tariffs
  by country/region, 89t
Africa Growth and Opportunity Act (AGOA), 4, 164, 383
  preferences and textiles and apparel, 187
ROOs, 185–186
Africa, Caribbean, and Pacific (ACP), 4
Agenda 2000, 258, 261
aggregate measure of support (AMS)
  Amber Box, 246
  bindings, 29
  calculations, 225–226, 230–231
  ceilings, 225
  current totals, 248t–249t
  de minimis, 224, 225
  definition, 224
  developing country reductions, 74
  difference from PSE, 226
  estimations, 231
  levels, 229
    average, 225
      by country (1999), 246
    market price, 29
MPS, 234, 235, 338
  framework, 240
product-specific, 229
reductions, 230
  total, 226
  total bound, 13
  totals without payments, 250t
URAA double coverage, 234–235

agriculture and food
  average import tariffs in developing countries, 45t
  bilateral trade flows from liberalization, 377t
  Doha scenarios, 362t–363t
  global losses, 12
  import-weighted average applied tariffs, 5t
  liberalization, 12t, 348
  liberalization impacts by country, 351t–352t
  merchandise trade liberalization, 58t
  production under Doha scenarios, 380t–381t
  removing all tariffs and agricultural subsidies, 46t
  volume changes from removal of tariffs and subsidies, 48t
  average applied tariffs by region, 43t
  average true preferential margin, 173t
  community development, 313
  decline in lending, 318, 319
  developing countries
    change in output under liberalization, 349t
    development role, 314–315
    distortionary protection, 324–325
    domestic support, 337–339
    disciplines, 29
    high-income countries, 42t
    tiered formula effects by country, 339t
agriculture (continued)
duties
by exporting country, 168t
exports, 170
economic development, 312–313
employment, 32n
Doha scenarios, 378t–379t, 379, 381
exports
average duties, 170
preference simulation, 182t
subsidies, 28, 339
eliminating, 20
welfare effect by country, 374t–375t
tariffs, 104–105
financial sector reforms, 319
functions to support industry, 312–313
global economy, 3
historical trade policies, 311–312
import-weighted average applied tariffs
by sector/country, 343t, 345t
imports
GTAP and LINKAGE, 383
tariffs, 6t, 44
liberalization
gains, 349t, 385
merchandise liberalization, 56t
policy instruments, 296
regional losses, 50
welfare effects by region, 49t
market access, 106t–107t, 335–336
binding overhang, 386
gains, 60
impact of barriers, 348
negotiations, 112
output
Doha scenarios by country, 378t–379t
policies
developed countries, 297–311
developing countries, 311–325
evolution, 312
nondistortionary approach, 324–325
price collapse, 295, 316
price incentives, 316
producer subsidy, 38
producer support, 7f, 8f
producers, 7
products
impact of liberalization on self-sufficiency, 354t
protection, 90
by reform scenarios, 110t–111t
levels, 7–8
rates, 336
three pillars of, 47, 49
reform
and food output, 350
and nonagricultural tariff cuts
Doha scenarios, 361
farm subsidy cuts, 334
global, 50
market access gains, 60
scenarios, 94–115
alcohol and tobacco, 104
bound duties, 96t–97t
descriptions, 93
market access, 106t–107t
subsidies
avoiding, 324–325
cuts, 12
elimination of, 11
impact on developing countries, 46t, 48t
welfare effects, 49t
support
pills, 221
policies, 195, 201
programs, 28
surpluses, 319
tariff bindings, 20
tariff protection, 318
tariff protection by economy/region, 320t–321t
tariff-cutting scenarios
simulated impact on prices, 183t
tariffs
applied by country/region, 89t
key features, 88
welfare effects from removal, 49t
trade liberalization, 37–38
trade policies
defensive and offensive approaches, 321–323
trade reform
assessing effects, 341–342
value added
liberalization impacts by country, 358t–359t
alcohol and tobacco
agricultural reform scenarios
trade volume, 104
sensitive products, 94, 109
tariffs, 95
Amber Box, 224, 227t, 228t, 245
AMS, 246
Brazil, 228t
CAP, 260
definitions, 222
EU, 227
low support, 262
policies, 224
U.S. expansion, 227
U.S. totals, 226t
AMS. See aggregate measure of support
analysis role in negotiations, 83
applied and bound agricultural tariff rates
by country/region, 91t
applied duties, 101
applied rates
reduction, 338
applied tariffs
actual, by region, 6
additional regulations, 157
administration changes, 153t–154t
administration method and additional
regulations, 142t–143t
average
for all goods by country, 362t–369t
import-weighted by sector/region, 343t
total TRQ value, 157
base tariff reductions by reform scenario,
98t–99t
bound tariff relationship, 90
GTAP 6.05 vs. 5
by sector, 388t–391t
import-weighted average, 345t
imports by sector/region, 43t
in-quota tariff binding, 140
in-quota trade and fill rates, 138t–139t
key features by country/region, 89t
protection rates
world average, 171t
quota administration, 136
quota regime, 129t
quota restrictions, 147
Argentina, 238, 267t
Armington elasticities, 341, 397n
global average in GTAP-AGR and LINKAGE
by product, 392t
Asian tiger economies, 32n
asymmetric preferences. See nonreciprocal
preferences
auctions, 143t
in-quota trade and fill rates 138t–139t
quota administration, 137
Australia, 265t, 391t
average-cut approach, 81, 84
base case
incomes and trade liberalization by country,
393t–394t
baseline
trade distortions, 40
basic-needs approach, 327n
to poverty, 315
Benin
Cotton Initiative, 272
bilateral agreements, 164
bilateral differences
import-weighted average agricultural tariff,
343t
bilateral trade flows
baseline changes from liberalization
Doha scenario, 377t
nonagricultural tariff cuts and agricultural
reform, 16t
binding overhang, 13, 91, 158n
after the Uruguay Round, 90
developing countries, 15, 103
in-quota and out-of-quota tariffs, 136
reduction, 31, 386
tariff reform, 83
bioenergy crops, 311, 327n
Blue Box, 245
Brazil, 228t
cap, 240, 241n
definition, 222, 337
direct payment schemes, 229
Doha outcome, 308
European Union, 227, 227t, 261
exemptions, 246
Japan, 228t
July Framework Agreement, 229
policies, 222
reductions, 241
separate rules, 225
support limits, 247
United States, 226t, 227, 298
bond schemes, 306–307
border barriers, 342
borrowing
importers, 216
bound and applied agricultural tariff rates by
country/region, 91t
bound duties
base level and reductions by reform scenario,
96t–97t
cap, 102
freeing of, 101
world average, 95
bound tariffs
  applied tariffs and market access, 90
  by region, 6t
cuts, 12
Brazil
  agricultural credit, 327
  agricultural development, 239
  applied tariffs, 389t
  domestic support programs, 228t
  MPS, 231t
  transportation improvements, 239
Brazil-U.S. cotton dispute, 287–288
  agricultural support via litigation, 237
  Green Box inclusion, 230
  URAA framing, 234
Burkina Faso
  Cotton Initiative, 272, 274
buyout, 299, 299t
  Australia, 326n
  bond schemes, 306–307
  conducive conditions, 305
  large-sized, 306–310
  steps for adherence, 309
  tobacco, 301–302, 302, 305, 326n
  U.S. farm subsidy payments, 309
  U.S. farm support programs, 307–310, 308t
  U.S. peanut and tobacco, 303t
  U.S. peanut reform, 299–301

Cairns Group
  agricultural trade policies, 322
  members, 218n
Canada, 263t, 391t
  Cancun Ministerial (September 2003)
  Derbez text, 73
  failure of, 274, 335
CAP. See Common Agricultural Policy
cap. See tariff cap
capital user cost, 356t
Caribbean Basin Initiative (CBI), 4, 164, 383
cash-out
  alternatives, 298–299, 299t
  sugar producers, 304
  U.S. farm policy, 297
  U.S. peanut reform, 300
CBI. See Caribbean Basin Initiative
ceilings
  AMS, 225
  bindings, 6, 90
Centre d’Etudes Prospectives et d’Informations Internationales (CEPII), 43
  GTAP software, 88
  MAcMAP, 162
cereals. See commodities
CGE. See computable general equilibrium
CGIAR. See Consultative Group on International Agricultural Research
Chad, 272
China
  applied tariffs, 388t
  cotton subsidies, 276–277
tiered formula, 26
cigarettes. See tobacco
  commitments. See WTO commitments
Committee on Agriculture
  Special Session
cotton, 275
commodities, 110t–111t
  AMS totals without payments by country, 250t
  average true preferential margins 173t
  barriers, 90
  Cotton Initiative stimulating reform, 290
differing tariff rates, 109
  EAGGF subsidies, 210t–211t, 213t
  EU subsidization rates, 214t–215t
export credits, 217
export subsidy rates, 206t
  protection, 109–110
  reform scenarios, 110t–111t
  rents, 150
  subsidy cuts stimulated by cotton reform, 286
  total AMS by country, 248t–249t
TRQ, 112, 143–144
  versus non-TRQ
  production value by OECD countries, 120t–121t
  trade value by OECD countries, 122t–123t
  volume changes, 47
  water in tariff estimates for TRQs, 132t–135t
commodity-specific compensatory payments, 227
  Common Agricultural Policy (CAP), 227, 258, 260
  1992 MacSharry reform, 205
Common Market, 164
  community development, 313
  criticisms, 327n
  Cotton Initiative, 274
  competition, imperfect, 151
  composition effects, 171, 172
agricultural duties, 168t–169t, 170
computable general equilibrium (CGE) preferences, 178–179, 187
concessions
SDT, 70, 77
tariff schedules, 71t
conservation reserve program (CRP)
idled crop land, 310
United States, 297
Consultative Group on International Agricultural Research (CGIAR), 314
consumer demand systems, 39
Cotonou Agreement, 164, 165, 186
preference erosion, 188
textiles and clothing, 187

cotton
countercyclical program reform, 287
domestic support, 277
elasticities, 280–281
exporters, 275
import tariffs, 276
prices, 280
producers and production, 277, 284
subsidies, 15
  China, 276–277
  coverage of studies, 279
cuts, 338
  elimination, 30, 272
EU, 277
future price effects, 279
global, 276–278
lack of benefits for poor countries, 273
loss from continuance, 283
market effects, 279–282
marketing loans, 287
policy, 272
price effects, 350
  programs
determining degree of harm, 286
  reduction negotiations, 275
  reform negotiations, 286
  simulation models, 279
U.S. programs, 278
West African countries, 328n
supply response, 281–282, 282
textile manufacturing, 276
trade background, 275
United States, 282
cotton dispute. See Brazil–U.S. cotton dispute
Cotton Initiative, 29–30, 273
becoming a global issue, 273
benefits to LDC producers, 282–289, 286, 289
compensation, 275, 282–285, 288
  basis, calculations, and criteria, 283, 284
  investments in public goods, 285
  proposal, 274
DDA, 272
farm commodities
  reform stimulation, 290
pressuring EU and United States, 289
price and welfare impacts, 281
trade benefits, 285–289
West African countries, 272
countercyclical payment
cotton, 278
U.S. 2002 Farm Bill, 309–310
U.S. farm support program buyout, 307–308
United States, 298
credit conditions, 318–319
crop insurance program, 278
crop insurance subsidies, 287
cross-product coefficient
  MFN tariffs by reform scenario, 100t–101t
CRP. See conservation reserve program
current access quotas, 117, 122, 130
  cutout, 299, 299t
dairy, U.S., 131
DDA. See Doha Development Agenda
de minimis
  AMS rules and values, 224, 225
  July Framework Agreement, 229, 337
  levels, 229
  notified data for support, 246
  total AMS without payments (1999)
    by country, 250t–251t
U.S., 225
debt crisis (1980s), 316
deceptions, 83
Decision, The, 70
decoupled income support
  EU, 227
  Green Box, 240
guidelines, 223
  Single Farm Payment, 238
decoupling, 326n–327n
dirty, 296
defensive approach
  agricultural trade policies, 321–322
Derbez text, 73
developed countries
agricultural policy reform, 297–311
AM S (1999), 248t–249t
AM S totals without payments (1999) by commodity, 250t
average tariffs, 90
reciprocal tariff concessions, 63
URAA implementation, 2224
WTO notifications, commitments, and base levels of support, 254t–255t
developing countries, 41t
agricultural assistance, 54t
agricultural export average tariff, 104–105
agriculture employment, 32n
agriculture policies, 311–325
AM S totals (1999), 248t–249t
AM S totals without payments (1999) by commodity, 250t
AM S, lower reductions, 74
bilateral trade flows from liberalization by sector, 377t
binding overhang, 91, 103
change in output under liberalization, 349t
definition, 32n
Doha Round, view of, 321
export volume changes, 48t
GATT and SDT, 63
Green Box use, 322
import-weighted average tariffs by sector, 345t
liberalization gains by sector, 349t
liberalization impact on self-sufficiency in food and agriculture, 354t–355t
market access from agricultural liberalization, 53t
nonagricultural tariffs, 54
pattern of trade subsidies, 201
poverty issues, 296
preferences on welfare, effect of, 395
raising standards, 67
rapid liberalization risks, 76
reform participation, 31
cost of, 103
Doha scenarios, 353
safeguards and special rules, 66
SDT, 324, 386–387
self-designation, 67, 334
tariff cap, 72
tariff-cutting formulas, 71
tariffs and agricultural subsidies, 46t
tariffs, higher average, 90
trade distortions, 40, 54t
trade liberalization, 45
impacts on real income, 384t
trade reform gains, 11
TRQ rents received, 177t
URAA implementation, 224
URAA SDT provisions, 69t
welfare gains
removal of tariffs and subsidies, 52t
services trade liberalization, 55f
WTO notifications, commitments, and base levels of support, 256t–259t
WTO usage, 357
developing economies
applied import tariffs, average, 43t
bilateral trade flows, 16t
trade liberalization, 56t, 57t
welfare effects from removal of tariffs and subsidies, 49t
development
export-oriented strategies, 316
poverty alleviation, 315
role of agriculture, 314–315
SDT, 68
Development Box, 75, 328n
DFID. See United Kingdom’s Department for International Development
Differential and More Favorable Treatment, Reciprocity, Fuller Participation of Developing Countries, 64, 165, 190n
differential treatment. See Special and Differential Treatment
direct payment program
Blue Box, 229
cotton, 278
dirty decoupling, 296
disaster relief, 223
discontinuities, 85
distortion
degree of, 237
domestic support pillar, 236
elimination, 37
welfare impact, 50
July Framework Agreement, 229
reduction scenarios, 247–253
SDT, 76
tariffs, 33n
distortionary protection, 324
diversification, 172
Doha Development Agenda (DDA), 3. See also Doha Round
Cotton Initiative, 29–30, 272
Enabling Clause, 64, 190n
preferences, 165
environmental program, 224
environmentalism, dirty, 310
EU. See European Union
Euromed Initiative
preferences, 165
European Agriculture Guarantee and Guidance Fund (EAGGF)
cereals and dairy, 218n
EU farm subsidies, 206–207
exports subsidies, 213t
refunds, 208t, 216t
subsidies by commodity, 210t–211t
subsidies by product category, 208–209
European Commission, xiii
sugar reform plan, 261
European Free Trade Agreement (EFTA), 165
European Generalized System of Preferences, 165
European Union (EU)
Agenda 2000, 178
agricultural support changes, 229
AM S, total, 246
applied tariffs, 390t
CAP, 227
bond schemes, 306
reform, 235
cash-out price support interventions, 298
cash-out reforms, 306–307
cotton policy (2005), 287
cotton subsidies, 277
budget outlays, 284
cotton supply responses, 281
domestic support, 227
Blue, Green, and Amber Boxes, 227t
reductions needed, 260t
domestic support reduction, 252–253
EAGGF refunds, 216
export subsidies
and OECD PSEs, 208t
ratio to production, 209
reductions, 298
farm trade policy, 206–209
joint U.S. framework (August 2003), 323
MPS, 231t
notifications by commodity, 252t
official administrative prices, 269n
subsidies, use of, 208
subsidization of farm production, 209
subsidization rates
based on production, 209
by commodity, 214t–215t
sugar program, 232–233, 261
trade policy, 165, 166f
utilization rates by category, 204t–205t
Everything But Arms (EBA), 4, 164, 165, 185–186, 190n, 383
access compared with EPAs, 190n
preferences and textiles and apparel, 187
exchange rate
1960s–1980s, 318
real, 327n
export competition pillar, 75
export credits, 43, 212
cereals, 217
cotton guarantees, 278, 287–288
distortion, 218
July 2004 Framework Agreement, 195
poor countries, 216
United States, 217
export subsidies
agricultural, 28, 339
agricultural liberalization gains, 52t
by product, 203–206
comparisons, 206
Doha Agreement, phasing out, 70
EAGGF, 210t–211t, 213t
elimination of, 12, 13, 23, 75, 195, 208
equivalent forms, 212
EU farm trade policy, 206–209
EU ratio to production, 209
EU reductions, 298
global impact, 13t
magnitude, 196, 207
middle-income country use, 200–201
notification, 28
policy recommendations, 218
price gaps, 196
product classification, 218
rates by commodity, 206t
restricting use of, 201
share in PSE, 207
subsidization component size, 212–213
trend, 200
users, 43
welfare effect of elimination by region, 49t
WTO member total commitments, 197
export volume changes, 47
export-oriented strategy, 315
development, 316
exports. See agricultural exports
FAO. See Food and Agriculture Organization
farm export subsidies
elimination of, 50
farm output, 17
farm policy, 30, 31
farm support programs
dirty decoupling, 296
fill rates, 137
by administration method and additional
regulations, 142t–143t
impact of regulations, 138
reduction causes, 147
TRQ, 141
TRQ trade by economy, 144t, 146t
financial sector reforms, 319
financing
importers, 216
first-come, first-served, 149–150
additional regulations, 139
administration changes, 153t–154t
by administration method, 143t
in-quota trade and fill rates, 138t–139t
quota administration, 136–137
TRQ commodities, 150
food. See also agriculture and food
aid, 212
liberalization impact on self-sufficiency by
region, 354t
liberalization impacts on output by
country/region, 351t–352t
production exported under Doha scenarios,
381
by country/region, 380t–381t
role of, 39
security, 87
Food and Agriculture Organization (FAO), 32n
cotton compensation, 274–275
cotton price review, 280
food security box, 328n
food, processed
import-weighted average applied tariffs by
sector/country, 345t
output change under liberalization, 349t
free trade, 22
SDT, 63
WTO negotiations comparison, 271
Generalized System of Preferences (GSP), 164
European, 165
nonreciprocal tariff preferences, 383
textiles and clothing, 187
global impact
agricultural tariff and subsidy removal, 13t
Global Trade Analysis Project (GTAP), 9, 341
agricultural imports and TRQs, 383
background, 396n
comparison by sector, 388t–391t
elasticities
real incomes and liberalization, 393t–394t
market access geography, 88
Version 5 and 6.05 comparison, 387–395
Version 6.05, 10
preferences, 382–383
PTAs, 162
Global Trade Analysis Project-Agriculture
(GTAP), 38, 60n–61n
Armington elasticities, 392t
global welfare gains, 16
Green Box, 75, 245
areas of concern, 237–238
Brazil, 228t
countercyclical payments, 310
definition, 222
developing countries' use, 322
distortion, 237
EU, 227, 227t, 261
guidelines, 223, 229
Japan, 228t
payment cuts, 241
phasesout of Amber and Blue Boxes,
236–237
policies, 222, 240
U.S. cotton programs, 288
U.S. totals, 226t
green payments, 310
Green Revolution, 314, 315, 316
poverty effects, 327n
Harbinson, 81
agricultural reform scenarios, 94
Doha scenarios, 357
formula, 395n
proposal, 84, 85f, 336
Harmonized System
agricultural market access, 335
high-income countries, 41t
agricultural domestic support, 42t
G-20, 323
General Agreement on Tariffs and Trade
(GATT)
Article XXIV, 164
balance of payments and Article XII, 77n
Enabling Clause, 190n
nonreciprocity and Part IV, 64, 77n
preferences, 163, 164
rules, 32n
Harbinson, 81
agricultural reform scenarios, 94
Doha scenarios, 357
formula, 395n
proposal, 84, 85f, 336
Harmonized System
agricultural market access, 335
high-income countries, 41t
agricultural domestic support, 42t
Index
high-income countries (continued)
agricultural support policies, 195
bilateral trade flows from liberalization by
sector, 377t
definition, 32n
liberalization
  gains by sector, 349t
  impact on self-sufficiency in food and
  agriculture, 354t–355t
  impacts on real income, 384t
trade distortions, 40
high-income economies
agricultural assistance removal, 54
average applied import tariffs, 43t
bilateral trade flows, 16t
import-weighted average applied tariffs by
sector, 345t
nonagricultural tariff removal, 54t
textiles and apparel, 57t
trade distortions removal, 54t
trade liberalization, 56t
welfare effects from removal of agricultural
 tariffs and subsidies, 49t
historical importers
  additional regulations, 139
  administration changes, 153t–154t
  by administration method and additional
  regulations, 142t–143t
  in-quota trade and fill rates, 138t–139t
  quota administration, 136–137
ICAC. See International Cotton Advisory
Committee
Iceland, 266t
ILEAP. See International Lawyers and
Economists Against Poverty
IMF. See International Monetary Fund
import market access, 13t
import quotas, 152
  fill rate, 151
  monopsony, 151
import substitution industrialization (ISI), 312, 313, 315
revaluation, 316
import tariffs, average
devolving countries, 45t
import-weighted average applied tariffs, 5t
  by sector/country, 345t
importer financing, 216
imports
  out-of-quota, 126f, 127f
  overquota, 118, 127f
rationing, 117
TRQ trade by economy, 144t–146t
under tariff quotas, 119
with quota fill or underfilled, 125f
in-quota imports
  by regime, 128t–129t
  TRQ trade by economy, 145t, 147t
  with and without quota fill, 124f
in-quota tariff, 27
  applied tariffs and auctions, 138
  bound average and TRQ value, 157
  regime, 119–120, 155
  trade value effects, 130t
  TRQ administration, 136–137
  TRQ trade by economy, 145t, 147t
in-quota trade and fill rates
  by TRQ additional regulation, 140t–141t
  by TRQ administration method, 138t
income
global trade reform, 344
liberalization impacts by country/region, 346t
income insurance programs, 223
income support, decoupled. See decoupled
  income support
income tax, 86
income transfers
  poverty alleviation, 320
India, 388t
industry
  average true preferential margin, 173t
  decomposition of duties by exporting
country, 169t
infrastructure, 237, 238
insurance program
cotton, 278
Integrated Framework
  expansion, 387
  market expansion rewards, 31–32
  trade reform awards, 189
Integrated Rural Development, 315, 317–318
revision, 316
International Cotton Advisory Committee
  (ICAC), 274, 276
International Lawyers and Economists Against
Poverty (ILEAP), 283
International Monetary Fund (IMF)
  financial reform in agricultural agencies,
  319
Trade Integration Mechanism
  payment shortfalls, 188
International Trade Commission (ITC), 162
ISI. See import substitution industrialization
Index

Japan, 390t
  domestic support programs, 228, 228t
MPS, 231t
rice imports, 155
STEs, domestic policy response, and rice
tariff quota, 156t–157t
July Framework Agreement, 3, 9, 10, 32
agricultural negotiations, 112
agricultural reform, 335
Blue Box, 238, 337
Cotton Initiative, 274, 275
de minimis provision, 337
development and agriculture, 335
domestic support, 74
  base of reductions, 337
future agreements, 247
gains, 19, 385, 387
implementation, 229
liberalization schedule, 195
market access
  features, 84–88
  nonexport subsidies, 196
MPS, 337
objectives missing from DDA, 81
policy changes, 229–230
reduction scenario basis, 264
SDT, 23, 26, 196
  and annex, 70
  and paragraph 1, 69
categories, 71t
sensitive products, 25
designation, 87
STEs, 78n
three pillars, 221–222
tiered reductions in AMS, 337
trade distorting policy, 237
trade reform possibilities, 240
URAA and subsidies, 197

Korea, Republic of, 268t, 391t
labor mobility, 353
land idled, 310
land reform, 313–314
land user cost, 356t
least developed countries (LDCs)
  binding overhang, 92
classification, 395n
  tariffs, 90
LEI. See Dutch Agricultural Economics Institute
  lending
  decline in agricultural, 318
liberalization
agricultural policy instruments, 296
agriculture
  high-income countries' output, 348–349
agriculture and food
  global gains, 348
agriculture, food output, and trade,
  full and partial impact on agricultural value
  added, 358t–359t
gains by region/sector, 349t
gains for the poor, 385
global merchandise
  impact on self-sufficiency in food and
  agriculture, 354t
licenses on demand, 147–150
merchandise trade, 60, 344
  poverty alleviation under Doha, 381–382
real factor price impacts, 356t
real income impacts, 384t
nonagricultural, 51
nonagricultural tariffs, 50
of agricultural tariffs, 47, 49
of merchandise trade
  global gains, 384
  impacts on income, 346t
poverty impacts
  Doha scenarios, 382t
preferences, 174
  rapid, 76
  regional losses, 50
rents, 178
schedule
  July 2004 Framework Agreement, 195
services trade
  developing country gains, 55f
simulations experiments, 92
trade indicators by country/region, 347t
welfare effects from removal of all
  agricultural tariffs and subsidies, 49t
license allocation, 147
licenses on demand
  additional regulations, 139
administration changes, 153t–154t
  by administration method and additional
  regulations, 143t
licenses on demand (continued)
in-quota trade and fill rates, 138t–139t
liberalization, 147–150
quota administration, 136
LINKAGE, 31, 397n
agricultural imports and TRQs, 383
Armington elasticities by product, 392t
closure rules, 341–342
future trade reform effects, 341–342
GTAP version comparison, 387–395
projection of world economy, 344
subsidization, 212
livestock, 39
loss assistance payments, 224
MacSharry Reform, 258, 260
CAP, 205
cash-out, 298
Mali, 272
manufactures
import-weighted average applied tariffs, 5t
welfare effects of liberalization, 56t
manufacturing
bilateral trade flows from liberalization, 377t
developing countries
output change under liberalization, 349t
import-weighted average applied tariffs
by sector/country, 345t
margin. See true preferential margins
market access, 5
agricultural, 335–336
formulas, 24
increases, 12–13
liberalization, 53
reform, 60
analysis of approaches, 82
barriers
impacts on welfare, 348
preferences, 186
expansion, 31
expansion through TRQ expansion, 88
gains, 23, 26, 52t, 105
geography, 88–92
nonagricultural, 16, 31, 51, 339–340
expansion, 386
welfare impact, 50
preferential, 117
SDT, 70
tariff caps reducing barriers, 108
tariff-cutting formulas, 104–109
TRQs, 15, 26
WTO members, 163
market loss assistance payments, 263t
market price support (MPS)
abolishment, 338
AMS, 240
calculations, 234
percentage by selected countries, 231t
trade-distorting support, 338
July Framework Agreement, 337
loopholes, 235
programs, 225–226
AMS calculations, 230–231
double coverage, 234–235
removal from AMS, 235
marketing loan program
cotton, 278
marketing subsidies, 238
marketing support, 240
meat. See commodities
merchandise
average import tariffs for developing
countries, 45t
bilateral trade flows from liberalization, 377t
freeing, 11
import-weighted average applied tariffs, 5t
liberalization, 12t, 55, 60, 344
developing countries, 45
efficiency and terms of trade, 59t
gains, 349t, 384, 385
income effects by country/region, 346t
poverty alleviation under Doha, 381–382
real factor prices, 356t
welfare effects, 376
real income impacts from liberalization, 384t
removal of all tariffs and agricultural
subsidies, 46t
removal of cotton subsidies, 350
trade distortions, 13
trade facilitation, 52–53
trade reform, 51, 53
volume changes, 48t
welfare gains by region, 54t
merchandise tariffs
Doha scenarios, 366t–369t
merchandise trade liberalization, 384t
Mercosur, 164
Middle East and North Africa, 389t
Midterm Review (MTR), 258, 261
Millennium Development Goals
nonreciprocal preferential market access, 164
minimum access quotas, 117, 122, 130
percentage of TRQ trade, 158
Ministerial Declaration
SDT for developing countries, 68
Mirage-Ag model, 179
models
agricultural support policy, 201
cotton subsidies simulations, 279
monopsony, 151
most-favored-nation (MFN)
average duty, 190n
bindings, 19, 385
by region, 6
cross-product variabilities, 102
preferences, 65, 162–163
tariffs, 97
bound, 15, 20
bound and applied agricultural rates by country/region, 91t
cross-product coefficient by reform scenario, 100t–101t
protection rates, 171t
TRQ expansion, 87–88
MTR. See Midterm Review
multilateral liberalization
policy implications, 187–188

NAFTA. See North American Free Trade Agreement
New Zealand, 391t
newly industrialized economies (NIEs), 320t
nonagricultural market access, 21, 31, 339
expanding, 386
nonagricultural merchandise trade liberalization, 51
nonagricultural tariff bindings
Doha scenarios, 357
nonagricultural tariff cuts, 16
Doha scenarios, 361
nonagricultural tariff liberalization, 50
nondiscrimination, 68
nondiscriminatory market access, 163
nonmonotonicity, 85
nonreciprocal preferences, 185, 383
access to markets, 161
U.S. regimes, 186
nonreciprocal trade agreements, 164
North American Free Trade Agreement (NAFTA), 164, 184
Norway, 266t
notifications. See WTO notifications
offensive approach
agricultural trade policies, 323
Organisation for Economic Co-operation and Development (OECD), 39, 226
out-of-quota imports, 128t–129t
TRQ trade by economy, 145t, 147t
with and without quota fill, 126f
out-of-quota regime, 155
out-of-quota tariffs, 27
applied and auctions, 138
effects on freeing trade, 131
TRQ trade by economy, 145t, 147t
outward-oriented development strategies
agricultural role, 314–316
overfill. See quota overfill
overquota
by regime, 128t–129t
import regime, 155
imports, 118, 127f
participation
in Doha reforms, 17
in Doha Round, 31
payment-in-kind (PIK) program, 304
Peace Clause, 75
peanuts, 325n
buyouts, 303t
production distribution, 325n–326n
U.S. reform, 299–300
PIK. See payment-in-kind
pillars, 221
agricultural protection, 47, 49
agricultural support programs, 23
Doha framework, 8
domestic support, 236
export competition, 75
policies. See agricultural policies
policy recommendations
export subsidies, 218
politics
influence on negotiations, 264
poor
decrease under trade liberalization, 19t
location of, 17
poverty
alleviation, 296, 318–321
abandonment of sectoral interventions, 317
Doha scenarios, 381–382
income transfers, 320
poverty (continued)
armed conflicts, 319
baseline, 382t
definition, 17
development strategy, 315
Doha scenarios, 382t
Green Revolution effects, 327n
liberalization gains, 385
reduction, 17
trade reform, 353
preference erosion, 17, 92, 162–163, 174, 187
developing countries, 27–28
diversification, 172
Doha scenarios, 383
impacts, 178
International Monetary Fund's Trade Integration Mechanism (TIM), 188
multilateral liberalization, 174
poor countries, 188
ROOs, 396n
preference simulations
geographical breakdown, 180t, 181t
preferences. See also tariff preferences
CGE simulations, 178–179, 187
compensation, 65
competing, 186
depreciating assets, 65
GATT Article XXIV, 164
GTAP Version 6.05 database, 382–383
importance of, 179
multilateral liberalization, 174, 179
nonreciprocal, 383
preserving, 73
reciprocal agreements, 162
ROOs, 182
tariff-cutting scenarios simulations, 185t
textiles and apparel, 187
TRQs, 163
utilization of, 181–187
welfare effect, 395n
preferential agreements, 4
preferential schemes, 163–164
compliance costs, 183
preferential trade agreements (PTAs), 161
prices
agricultural collapse, 316
AMS calculations, 234
band systems, 74
gap between world and domestic, 196, 200
incentives against agriculture, 316
support, 154
EU cash-outs, 298
peanut reform, 300
U.S., 297
tariff cut simulations, 183t
volatility, 152, 154
producer decisions, 238
producer group
administration changes, 153t–154t
producer retirement programs, 223
producer support estimate (PSE), 7
difference from AM S, 226
EU estimates, 208t
export subsidies, 207
high-income countries, 42t
product classification
export subsidies, 218
production flexibility contracts
Quad, 201
export subsidy commitments, 203f
quota administration
changes in methods, 152, 153t–154t
inefficient methods, 137
methods, 138t
methods of and additional regulations, 136–141
trade effects, 147–152
quota binding, 128t
regime, 155
trade value effects, 130t
quota expansion, 27
licenses on demand, 149
versus tariff reduction, 118, 119
quota fill, 124f, 138t–139t
and underfill, 125f
quota fill rate
import, 151
quota overfill, 119–120, 137
quota regimes, 120–121
  value of trade by, 128t–129t
quota rents
  by quota regime, 129t
  dissipation, 137
quota administration, 138
quota underfill, 118, 125f, 137
  by regime, 128t–129t
licenses on demand, 149
total TRQ value, 157
TRQ trade by economy, 144t–146t
quotas
  increases and impact on trade expansion, 128–129
  seasonal, 139
random-walk
  simulation experiments, 92
real factor prices
  of liberalization, 356t
real income
  Doha scenarios by country/region, 370t–373t
  liberalization, 384t
  liberalization by country/region, 393t–394t
reciprocal agreements, 162
reciprocal tariff concessions, 63
Redistribution with Growth, 315
reform
  farm policies, 30
  in the EU and United States, 258
  participation, 17
refunds
  export subsidies, 206–207
regime switches, 151
regions by economy, 41t
regulations
  quota administration, 156–157
  TRQ, 140t–141t
rent appropriation, 150
rent seeking, 151–152
rents. See also quota rents
  assessment, 176
  impact of multilateral liberalization, 178
  TRQ value erosion, 178
rents received
  TRQs by developing countries, 177t
resource retirement programs, 224
returns to land by region, 184t
rice markets, 154
rice tariff quota, 156t–157t
rules
  equal participation, 108
rules of origin (ROOs)
  export subsidies, 183
  NAFTA, 184
  preference erosion, 396n
  preferences, 182
  textiles and apparel, 187, 189
rural development
  loan cuts, 319
rural growth, 296
safeguards, 66
safety net programs, 223
scaled dynamics
  real incomes and liberalization by country, 393t–394t
SDT. See special and differential treatment
seasonal licenses, 152
sectorwide initiatives, 273
self-designation
  developing countries, 334
  SDT, 23, 67
sensitive and special products, 15. See also special and differential treatment
agricultural reform scenarios, 103
alcohol and tobacco inclusion, 104
bound tariff rates, 15
exception rationale, 108–109
excessive use, 86–87
exemptions, 21, 98, 179
farm products
  Doha scenarios, 357
flexibility, 25
increasing share, 100–101
linked to commodities and food security, 72
rents and liberalization, 178
restrictions, 112
selection of, 396n
self-selected, 113
tariff lines, 105–106, 357
tariff modulation, 164–165
trade value and number of tariff lines, 94
trade volume, 104
services trade, 340
  liberalization, 52–53, 55
  reform, 16, 22
  welfare gains for developing countries, 55f
shadow tariff, 176
simulations, 92–95
  Doha scenarios, 353–382
  preferences
simulations (continued)
  geographical breakdown, 180t
  liberalization by country, 175t
  tariff-cutting scenarios, 182t
  impact on Sub-Saharan countries, 185t
Single Farm Payment, 229–230, 238, 310
South-North trade reform, 11
South-South
  concessions, 21, 386
  trade, 11, 20, 77
special and differential treatment (SDT), 23–24
categories, 71t
  concessions
    and economic benefits, 77
    by developing countries, 386–387
  developed countries, 66
developing countries, 67, 69t, 324
distortion, 76
Doha scenarios, 361
domestic support, 70
economic view, 75
GATT, 63
July Framework Agreement, 70, 196
market access for developing countries, 114
negotiations, 64
  preferences, 165
  self-designation, 67
types, 65
special products. See sensitive and special products
special safeguard mechanism (SSM), 70, 71t, 73–74
squeeze-out, 299, 299t
state trading enterprises (STEs), 138, 139, 212
  administration changes, 153t–154t
  by administration method and additional regulations, 143t
efficiency and fill rates, 150, 156
in-quota trade and fill rates, 138t–139t
July Framework Agreement, 78n, 195–196
quota administration, 137
rice tariff quota in Japan, 156t–157t
Step 2 program, 278, 287
Sub-Saharan Africa, 185t, 389t
subsidies. See also agriculture, subsidies; cotton subsidies; export subsidies
  agricultural producer, 38
  banning, 195
cuts necessary for reform, 334
EAGGF by commodity, 210t–211t
elimination of, 11, 12, 13
  impact on exports, 48t
import protection database, 342–343
marketing, transportation, and infrastructure, 238
reform impacts on developing countries, 53
subsidy payments
  U.S. buyout, 309
subsidy rates, 200
  by country, 199t
  EU by commodity, 214t–215t
sugar program
  cash-out, 304
  EU, 232–233
  U.S., 154
  AMS calculations, 232t, 233t
  commitments exceed consumption, 304
sugar reform
  1996 U.S. Farm Bill, 304
  Agenda 2000 CAP reform, 261tn
  European Commission, 261
  U.S., 303–305
supply management, 310–311, 326n–327n
support. See agricultural support
surpluses, 319
Swiss formula, 84
  commodities, 112
  effects, 103
  reform scenarios, 93, 94, 108
Switzerland, 267t
synthetics, 280–281
Taiwan, 391t
tariff rate quotas (TRQs), 26–27, 82
  administration, 136–137
  administration methods and trade effects, 147–152
agricultural imports
  LINKAGE and GTAP, 383
agricultural protection, 155
  by country/commodity, 143–144
  by country/region, 89t
commodities, 112
  barriers, 90
  production value, 120t–121t
definition, 117
expansion, 15
  market access, 88
  minimum access quotas, 122
WTO negotiations, 118
fill rates, 137, 141
importance of, 118–119
minimum access quotas, 158
preference erosion, 176
preferential, 163
Index

regimes, 155
rents
  methodology, 176
  received by developing country, 177t
value erosion, 178
research required, 158
total values, 157
trade by economy, 144t–146t
trade liberalization and value, 130t
water estimates, 132t–135t
tariff-cutting formulas, 335
  developing countries, 71
  market access impact, 104–109
  preferences and liberalization, 174
tiered, 21
tariff-cutting scenarios
  Sub-Saharan countries, 185t
tarification, 6, 32n–33n
dirty, 91
Uruguay Round, 221
tariffs
  aggregating across products, exporters, and importers, 190n
  agricultural export average, 104–105
  alternative tariff-cutting formulas, 106t–107t
  applied, 147
    by country/region, 89t
  average applied by region, 43t
  average import
devolving countries, 45t
base tariff reductions for average applied tariffs by reform scenario, 98t–99t
binding overhang, 158n
cap, 14
devolving countries, 72
Doha scenarios, 357
market access, 108
reform scenarios, 111
tiered formula, 102
commodities, 109
cuts
  consequences, 336
  preference erosion, 27–28
scenarios
  simulated impact on prices, 183t
  simulated impact on trade and welfare, 182t
distortion, 33n
escalation problems, 73
global agricultural features, 88
inquota regime, 119
liberalization of developing country exports, 48t
lower reduction commitments, 7172
modulation, 164
non-ad-valorem, 82
nonagricultural cuts, 16
nonagricultural removal, 50
preferences, 27, 82
protection
  agriculture, 318
  averages by region/economy, 320t–321t
  manufacturing, 8
  reciprocal concessions, 63
  reductions versus quota expansion, 118, 119
  reform complications, 82–85
  restrictive, 82
  revenues
    by quota regime, 129t
    lost potential, 137
  schedules
    trade agreements, 164
  shadow, 176
  TRQ trade by economy, 144t–146t
  water estimates, 132t–133t
  welfare effects from elimination of, 49t, 52t
terms of trade, 37–38, 51
  incurring a shock, 218n
liberalization, 58t
  preference simulation by region, 184t
textile manufacturing
cotton, 276
textiles and apparel
  average applied tariffs, 43t
  Doha scenarios, 364t–365t
  average import tariffs
devolving countries, 45t
  average true preferential margin by country, 173t
  bilateral trade flows from liberalization, 377t
  export quotas, 40
  high average tariffs, 44
  import increases, 47
  import-weighted average applied tariffs, 5t
    by sector/country, 345t
  liberalization, 12t, 22, 349t
  output under liberalization, 349t
  preferences, 187
  removal of all tariffs and agricultural subsidies, 46t
  ROOs, 187, 189
tariff protection by region/economy, 320t–321t
textiles and apparel (continued)
  trade liberalization, 59t
    by region, 57t
  true preferential margins, 172
  volume changes from removal of tariffs and subsidies, 48t
  welfare gains by region
    removal of tariffs, assistance, and distortions, 54t
  Thailand, 268t
  tiered formula, 25, 85f
  applied rates effect, 97
  cap, 102
  China, 26
  commodities, 109
  consequences, 95–104
  discontinuities, 86f, 112–113
  domestic support, 339t
  freeing of bound duties, 101
  July Framework Agreement, 84
  market access, 24, 26, 105
  reform scenarios, 93, 95
  tariff cuts, 71
  tariff reduction, 105
  versus proportional cut, 14, 102–104, 360–361
  tobacco. See also alcohol and tobacco
  buyout, 305, 326n
    compensation level, 302
    U.S., 303t
    production increase, 302
    U.S. consumption, 301
    U.S. reform, 301–303
  trade
    agreements, 164, 165
    bilateral flows, 377t
    costs, 54, 55
    distortion, 13
      patterns, 40–47
      reduction, 247–253
      removal, 37
    Doha scenarios, 359–361, 376
    elasticities, 39–40
    expansion, 128–129
    facilitation, 54, 55, 340–341
      welfare gains for developing countries, 55f
    indicators by country/region, 347t
    liberalization
      absence of gains in Sub-Saharan Africa, 54
      agricultural, 37–38
      assessment, 123
    developing country implications, 45
    global welfare gains, 16
    licenses on demand, 147–150
    merchandise
      efficiency and terms of trade, 58t–59t
      welfare effects, 56t
    nonagricultural, 51
    policy measures, 22
    quota regimes, 155
    reduction in poor, 19t
    trade value effects by quota regime, 130t
    TRQs, 119–131
    liberalization impacts by country/region, 351t–352t
    policy (1960s–1980s), 318
    preferences, 161
    reform
      assessing effects, 341
      awards for commitment, 189
      global gains, 11
      income gains, 344
    major (1997–2001), 342
    simulation of impacts from tariff cut scenarios, 182t
    TRQ administration methods and regulations effects, 147–152
    TRQ by economy, 144t–146t
    TRQ versus non-TRQ commodities in OECD countries, 122t–123t
    value by quota regime, 128t–129t, 130t
    volume
      agricultural reform scenarios, 104
      WTO regime, 165–166
    trade-weighted fill rates, 142
    transition economies, 41t
    average applied import tariffs, 43t
    market access from agricultural liberalization, 53t
    merchandise trade liberalization, 56t, 57t
    trade distortions, 40
    welfare effects from removal of agricultural tariffs and subsidies, 49t
    transition period, 72
    transportation support, 237, 238
      Green Box, 240
      traps, 83
      true preferential margin, 168t–169t, 170, 172
    average by sector/commodity, 173t
    MFN-applied, 171t
      source, 174
      truncated, 139t
UNCTAD. See United Nations Conference on Trade and Development
underfill. See quota underfill
United Kingdom’s Department for International Development (DFID), xiii
United Nations Conference on Trade and Development (UNCTAD)
preferences, 164, 190n
United States
1985 Farm Bill, 297
1996 Farm Bill, 262–263, 297–298
fixed payments, 307, 309
peanuts, 325n
production flexibility contracts, 309
sugar loan rates, 304
2002 Farm Bill, 263, 298
countercyclical payments, 308, 309–310
peanut reform, 300
preferences, 178
agricultural support changes, 229–230
Amber Box expansion, 227
AMS notifications by commodity, 253t
applied tariffs, 391t
Blue Box elimination, 227, 262–263
buyout
farm support programs, 307–310, 308t
peanut and tobacco, 303t
tax legislation, 326n
cash-out reform, 297
cotton countercyclical program, 288
cotton dispute, 287–288 (See also Brazil-U.S. cotton dispute)
cotton program, 276, 287–288
estimates, 282
cotton subsidies
budget outlays, 284
programs, 278
countercyclical payments, 288, 298
dairy price, adjusted AMS, 263t
dairy program, 235
de minimis, 227
domestic support, 226t
farm legislation, 227
reductions needed, 260t
export credits, 217
farm policy, 297
Green Box cotton programs, 286–287
Green, Blue, and Amber Box totals, 226t
joint EU framework (August 2003), 323
market loss assistance payments, 263t
MPS, 231t, 252
peanuts, 303t
price support programs, 297
Step 2, 287–288
sugar
commitments, 304
program
AMS calculations, 232t, 233t
reform, 303–305
tobacco, 303t
reform, 301–303
total AMS, 246
trade policy, 166–167, 167f
Uruguay Round
agricultural price collapse, 295
CAP negotiations, 258
pillars, 221
Uruguay Round Agreement on Agriculture (URAA), 6
agricultural support framework, 245
Amber and Green Box, 337
Amber Box spending, 224
AMS ceilings, 225
boxes, 222–223, 245
commitments, 197
framing, 234
SDT, 68, 69t
use-it-or-lose-it, 139
rent seeking, 151
utilization rates, 200
by country, 199t
EU by category, 204t–205t
Uzbekistan
cotton support, 277
volume, trade, 104
developing country exports, 48t
welfare indicator, 47
wages, skilled and unskilled
trade liberalization impacts, 356t
water estimates for selected TRQs, 132t–135t
water in tariffs, 131, 158n
weighted, 147t
trade-weighted fill rate, 139t
welfare
agricultural distortion removal, 50
agricultural export and domestic subsidies retention by country, 374t–375t
agricultural tariffs and subsidies, 13t, 49t
developing countries, 52t
agricultural trade reform, 47
Agricultural Trade Reform and the Doha Development Agenda

welfare (continued)
distribution of income effects
removal of trade barriers, 344
Doha reform scenarios, 14, 359–361, 361
free trade gains, 22
liberalization effects, 12t, 56t, 376
market access barrier impacts, 348
nonagricultural market access impact, 50–51
preference effects, 395
preference simulation by country, 184t
protection policy impact, 344
tariff-cut scenario impacts, 182t
trade liberalization
  developing countries, 58t
World Bank
  agricultural loan cuts, 319
cotton compensation, 274–275
LINKAGE, 31
World Development Report (1986), 317
World Trade Organization (WTO)
  agricultural trade, 6
  commitments, 254t–258t
    by country, 198t
    category definition, 203–204
EU, 204t, 208t
  notifications and record keeping, 218
  URAA, 197
  utilization rates, 200
  violations, 234
Committee on Trade and Development
SDT, 69
  cotton dispute, 287–288
  developing country participation, 321
domestic support, 225, 236
multilateral trade regime, 165–166
negotiations, 271
noncompliant members, 283
notifications, 197–198, 200, 254t–258t
  challenge mechanism, 286
EU, 208t
  LDC commodities, 201
  member relationships, 202
  middle-income countries, 200–201
  notified export subsidies, 202f
  of the EU by categories, 204t–205t
  quota administration methods, 152
  used export subsidies by country, 199t
record keeping
  export subsidies, 218
SDT, 68