
Index

- accountancy services 249–50, 429, 468
 - Accountancy Disciplines 220–221, 223–4, 225, 226, 227–8, 255, 256, 257, 272–3
 - international standards 249, 250, 251, 252, 273
 - Pakistan 497–502, 503–4
- adaptive governance 339
- Adlung, R. 258, 387, 392, 521, 595
- advertising 538
 - agencies 469
 - targeted 361
- Africa 27, 44, 137, 508–10, 515, 517, 532, 536
 - Program for Infrastructure Development in 532
 - Southern and Eastern 556
 - sub-Saharan 414, 435, 540, 553, 573, 575
- agriculture 129, 130, 135, 137, 244, 256, 427, 436, 439, 456, 602
 - Doha Round 521, 522, 580–581, 583, 588–9
- aid, international 174, 553
- air transport services 193, 252, 352, 526, 538, 549, 557
 - PIA Hajj Fares case (2009) 494–6, 503
 - regulatory/standards-setting bodies 250, 251
- airport and aviation security services 293
- Albania
 - notifications (GATS, Art III:3) 28
- Alianza del Pacifico 513
- Amazon 358, 467
- Andean Community 513
- Anderson, J. 66, 68
- Angola 140, 517, 563
- anti-competitive practices 155, 178, 229, 230, 240, 479
 - state-owned enterprises (SOEs) 309, 310, 311, 315, 319
- Anti-Counterfeiting Trade Agreement (ACTA) 340, 346
- anti-trust *see* competition authorities/policy/law
- Antigua and Barbuda 513
- APEC (Asia-Pacific Economic Cooperation) 28
- arbitrage, regulatory 526
- arbitral tribunal 213
- Argentina 300, 468
- ASEAN (Association of Southeast Asian Nations) 40, 532
- Asia 27, 46, 425, 508, 515, 516, 517, 536
 - South 150, 414, 435
 - South East 556
- Asia-Pacific 402
 - Economic Cooperation (APEC) 258, 264
 - policy changes since 2000 34–5
 - see also individual countries*
- audiovisual services 181, 400, 592
- digital trade 341, 349, 352–3
- EU-Canada CETA 236
- measurement 43, 56
- policy changes since 2000 33
- audit 152, 272–3, 429
 - Pakistan: ICAP minimum fees 497–500, 503–4
- Australia 104, 441
 - PTAs
 - Chile 344
 - Korea 234, 240
 - New Zealand 402
 - Singapore 344
 - TiSA 402, 407, 408, 409–10, 524
 - US 319, 527
 - state-owned enterprises (SOEs) 319, 325
 - Competitive Neutrality Framework (CNF) 321, 322–3
 - TiSA 402
- Austria 306

- automatic coverage of new services 604
automation 412, 423, 424, 445
- Bahrain 506
balance of payments (BOP) 43, 53, 54, 56, 449
Baldwin, R. 43, 68, 156, 170
Bangladesh 426, 435–6, 440–441, 517, 538, 554, 563
banks/banking 148, 150, 152, 181, 230–231, 439, 469
Bank for International Settlements (BIS) 250, 251
cross-border data flows 358
least developed countries (LDCs) 563
standards 250, 251, 272, 295
state-owned enterprises (SOEs) 311, 324
- Baumol, W. 162
behavioural dynamics of positive and negative listing 16, 385–411
methodological and empirical qualifications 398–400
theory
clarity of listing distinction 392–3
complexities in services trade agreements 391–4
compromise effects 397
dual role of trade negotiators 393–4
framing effects 392, 395–6, 399
Prospect 389, 390, 393, 395
rational choice, behavioural economics and services liberalization 388–91
salience effects 400
status quo bias and default rules 396–7, 398
ternary choice architecture 397
- TiSA 393, 401–3
cognitive effects 403–6
compromise effects 407–11
framing effects 404–5, 411
Prospect Theory 405–6
status quo bias and default rules 405, 406, 411
ternary choices 408–9, 411
- Benin 538, 554
Bern Convention 336
Bhutan 544–9
big data 64, 343, 359, 361
bilateral agreements *see* preferential trade agreements (PTAs)
Bolivia 513, 517
border and customs management 150
bounded rationality 389
Brazil 40, 136, 365, 414, 437, 567, 586, 587, 609
business services value chains (BSVC) 450, 453–9, 462–6
SISOSERV (Integrated System of Foreign Trade in Services and Intangibles) system 64
state-owned enterprises (SOEs) 300, 307
TiSA 403, 407
- BRICS 300, 305, 307, 451
see also individual countries
- broadcasting services
digital television 159
- Brunei 234
Brunei Darussalam 57
Burkina Faso 174, 178, 181, 183, 538, 554
Burundi 554, 562
business federations 104
business process outsourcing (BPO) 150, 365, 449, 460–462, 466–7, 468–9, 470–471, 472, 592
business services 47, 52, 125, 133, 143, 145, 147, 522, 600
demographics and labour markets 420, 436, 444
least developed countries (LDCs) 554–6, 566, 571
regulatory reform 178, 181, 183
skill intensive 150
standards
European Union 286, 291, 293–5
international 226, 297
trade costs and GVCs 66, 67–8, 74, 75, 76, 79, 81–2, 83
value chains and emerging economies 17–18, 448–74
conclusions and future challenges 472–4
gross trade values 449–53
human capital upgrading 462–6

- upgrading: conceptual framework 459–62
- upgrading trajectories of emerging economies 466–72
- value-added statistics 453–9
- Cadot, O. 163
- call centres 150, 282, 462, 467, 468, 469, 517
- Cambodia 130, 549
- Canada 154–5, 352, 425, 437
 - NAFTA *see separate entry*
 - professional services: sub-national regulation 252
 - PTAs
 - EU CETA 235–7, 240–1, 257, 319, 326
 - Honduras 235
 - Japan 235
 - Korea 235–6
 - TiSA 402, 410, 524
 - US 527
 - regulatory cooperation 262
- Canada – Autos* 196, 207
- Canada – Measures Relating to Exports of Wheat and Treatment of Imported Grain* 317
- Canada – Periodicals* 194
- capture, regulatory 161, 185, 594
- Caribbean Community (CARICOM) 443, 512–13
- CARIFORUM-EU Economic Partnership Agreement 240, 570–572
- Cassis de Dijon* 277
- Central African Republic 563
- Central America 44, 240, 402, 526–7
 - Central American Integration System 513
- Cernat, L. 83
- Chad 563
- chambers of commerce 285
- chemical industry 89, 97, 158
- Chile 234, 306, 402, 405, 408
 - business services value chains (BSVC) 450
 - PTAs 506, 513, 516, 524, 527, 529–30
 - Australia 344
 - US 319
- China 57, 94, 130, 135–6, 567, 586, 587, 601, 609
 - business services value chains (BSVC) 450, 451, 453–9, 462–6, 470, 472
 - cross-border data flows 365
 - demographics and labour markets 425, 435
 - digital trade 349
 - Hong Kong 57, 130, 135, 402, 470, 524
 - notifications (GATS, Art III:3) 28
 - policy changes since 2000 28, 34, 40
 - PTAs 506
 - Switzerland 235
 - TiSA 403, 407
 - state-owned enterprises (SOEs) 300–302, 306, 307, 311–12
 - background 312
 - examples of distortions of competition 310, 311
 - SASAC, role of 312–15
 - in trade negotiations 315
 - TiSA 403, 407
 - WTO 34, 448, 521, 530
- China – Audiovisual Products* 196–7, 200, 202, 203, 207, 208, 337, 338, 339, 340, 369
- China – Payment Services* 202, 204, 205–6, 207, 208, 273–5, 337, 369
- choice architecture *see* behavioural dynamics of positive and negative listing
- civil society organizations 593
- cloud computing 342, 359–60, 361, 362, 375, 379
- cluster approach 603
- Coase Theorem 389
- cognitive effects *see* behavioural dynamics of positive and negative listing
- coherence 263–4, 283, 289
- Colombia 235, 240, 302, 402, 405, 513, 516, 524
- colonialism 148
- COMESA (Common Market for Eastern and Southern Africa) 510, 562
- commodities 316

- communication services 47, 67, 126, 133, 148, 181, 185, 600
 - least developed countries (LDCs) 538, 566
 - see also* telecommunications
- community values 159
- comparative advantage in goods and service sector regulation 5–6, 85–107
 - comparative advantage
 - empirical set-up 95–7
 - in goods and services 88–91
 - regulatory 98–102
 - regulatory capacity as source of 91–7
 - services as inputs to goods 93–5
 - policy implications 102–6
- compensation 213–15
- competition authorities/policy/
 - law 18–19, 104, 105, 147, 155, 478–504, 607
 - European standards organizations (ESOs) 279–80
 - natural monopolies 156
 - state-owned enterprises (SOEs) 311, 323, 324
- telecommunications: GATS 229
- competition law and opening services
 - markets in developing countries 18–19, 478–504
 - government barriers to competition/trade 484–6
- liberalization of trade in services:
 - GATS 479
- Pakistan cases: public restraint
 - 486–7, 503–4
 - construction sector 496–7, 503
 - ICAP: minimum fees for audits 497–500, 503–4
 - ICAP: restricting training 500–502, 503, 504
 - LDI International Clearing House 487–94, 503
 - PIA Hajj Fares case (2009) 494–6, 503
- Pakistan's competition regime
 - 480–482
 - competition advocacy 483–4
 - competitive neutrality 482–3
- Competitive Neutrality Framework (CNF) 321–3, 325, 482–3, 503, 504, 531
- competitiveness of services exports 7, 123–51
 - assessing 127–31
 - domestic services sectors in relation to international trade 140
 - employment 137–40
 - factor intensities 133–5
 - linkages to rest of economy 140–143
 - sectoral composition of services exports 131–3
 - value added 143–5
 - whole economy 135–7
 - diagnostics of services determinants 145–7
 - domestic enabling factors 148–50
 - regulatory policy and trade barriers 147
- compromise effects 397, 407–11
- computer programmes 336
- computer and related services 133, 145, 349, 450, 526
 - classification 374–5
 - cross-border data flows 358, 360, 371, 378
 - demographics and labour markets 419, 436
 - digital trade 341, 349, 351
 - least developed countries (LDCs) 538, 555
 - measurement 43, 47, 56
 - modes of supply 52
- concession aversion 390
- Congo DR 538, 562, 563
- Congo Republic 140
- consensus: standard-setting 282, 283, 289, 294
- construction 47, 133, 145
 - demographics and labour markets 412, 418, 419, 420, 421, 423, 424, 425, 428, 439
 - European Union 286
 - Pakistan 496–7, 503
 - policy changes since 2000 34
 - trade costs and GVCs 74, 75, 76
- constructive ambiguity 206–7, 597

- consultation
 - domestic regulation: prior 228
 - European Union 288, 290, 292, 294
 - ISO 283
- consumer associations 104, 285
- consumer protection 184, 240, 345, 346, 354, 358, 364, 429, 595
- contract law 159, 184, 286, 291
- cooperation, regulatory 606–7, 609
- copyright 54, 332, 333, 346, 362, 364
- corporate governance of SOEs 327
- corporate law 159
- corruption 473, 519
- cost-benefit analysis 263
- cost-benefit bargaining 389
- Costa Rica 402, 469, 471, 472, 506, 513, 516, 524
- Costinot, A. 89
- costs 161, 600
 - cross-border data flows 362, 382
 - cloud computing 360, 362
 - data regulation 364–5
 - foreign professionals 429
 - least developed countries (LDCs) 540, 544, 555, 558, 567, 571, 574–5
 - standards 269, 272, 288
 - trade 127, 154, 184, 244, 262
 - global value chains and 4–5, 66–83
 - transaction 148, 159, 184, 275, 386, 388, 389, 398–400, 404, 405, 406, 411
 - transparency 260
 - travel 124–5
- creative industries
 - advertising 361, 469, 538
 - least developed countries (LDCs) 538
- credit cards 35
- cross-border data flows 14–15, 357–82
 - emerging technologies and data explosion 359–62
 - GATS 359, 366, 367–72, 378–82
 - classification conundrum 374–5
 - exceptions 372–4
 - technological neutrality 368–9, 370, 374, 379
 - localization requirement 363, 364–5, 370–372, 374, 376, 377, 380
 - motives for data control 364
 - other trade initiatives on data 375–8
 - regulating 362–4
 - blocking and filtering 363
 - costs 364–5
 - localization requirements 363
 - way forward 378–82
- Cuba 513
- cultural diversity 593
- cultural exception 336, 340
- cultural expression and public funding 354
- cultural industries 538, 571, 593
 - EU-Canada CETA 236
- cultural and social integration 443
- customs and border management 150
- cyber-security 345, 358
- cyber-terrorism or -warfare 373–4
- Czech Republic 302, 471–2, 473
- data flows *see* cross-border data flows
- data protection 149, 346, 353, 354, 364, 377–8
 - least developed countries (LDCs) 555, 556
- data/document management 150
- databases 263, 474
 - Design of Trade Agreements (DESTA) 109, 112
 - EU KLEMS 133, 463
 - EU Market Access 28
 - Global Trade Analysis Project 143
 - Governance Indicators 92, 99, 100
 - I-TIP Services 26, 28, 31
 - IMF Balance of Payment Statistics 449
 - OECD: bilateral services trade 107–8, 111–12
 - Trade in Services (TSD) 108, 112, 449
 - UN Services (UNSD) 108, 112
 - World Input-Output (WIOD) 72, 453, 454, 462
 - WTO: Regional Trade Agreements Information System (RTA-IS) 112
 - WTO: Statistics 449
- default rules and status quo bias 396–7, 398, 405, 406, 411
- delegated regulation 161
- Delimatsis, P. 256, 257

- democratic legitimacy 393
- demographics and labour markets:
 - implications for mode 4 trade 17, 412–45
 - Bangladesh's mode 4 preparedness 440–441
 - challenges 427
 - receiving countries 427–30, 445
 - sending countries 430–441, 445
 - India's mode 4 preparedness 436–9
 - outlook 414–18
 - labour shortages 418–23
 - policy responses and role of labour mobility 423–7
 - preferential trading agreements 443–4
 - promoting Mode 4 trade 441–2
 - managing mobility 442–5
 - supply capacity 442, 445
- design 67
- developing countries 57, 59, 255, 600–601
 - competition law and opening
 - services markets in *see separate entry*
 - competitiveness and services trade 124, 126, 144–5
 - cross-border data flows 362, 365, 378–9, 382
 - demographics and labour markets 412–13, 414–15, 430–436
 - digital trade 356
 - PTAs 348
 - diversified export strategies 45
 - international standards 227, 283
 - policy changes since 2000 27, 30, 33–4, 36, 38
 - positive and negative listing 406
 - GATS commitments 260
 - PTAs 400
 - preferential trade agreements (PTAs) 19–20, 30, 348, 400, 505–33
 - four country categories 515–19
 - GATS-plus instruments 519–29
 - number per country 512–15
 - relationship between trade negotiations and domestic reforms 529–32
 - regulatory reform and services trade:
 - methodology for *see separate entry*
 - special and differential treatment 581, 586–8, 609
 - state-owned enterprises (SOEs) 305
 - technical assistance 604
 - transparency obligations 228, 260
 - trends in services trade patterns 45–6
 - see also* emerging economies; least developed countries (LDCs)
- digital trade 13–15, 30, 56, 331–56, 600
 - digital television broadcasting 159
 - key issues and challenges 335
 - what we have 335–40
 - where action needed 340–343
 - least developed countries (LDCs) 544–9, 555
 - localization measures 343, 345, 348, 353, 354, 356
 - overview 331–2
 - changing regulatory context 332–4
 - few or no changes in international economic law 334–5
 - ways forward
 - multilateral solutions 348–55
 - PTAs 343–8
- disclosure 158
 - state-owned enterprises (SOEs) 321, 324
- distribution services 378
 - competition law 155
 - least developed countries (LDCs) 566
 - policy changes since 2000 29, 33, 34
 - regulatory reform and services trade 161, 178, 181, 184
 - trade costs and GVCs 74, 75, 76, 83
- distributional justice 159
- diversification 45, 130, 165, 378, 459, 531
- Djibouti 538, 549–50
- Doha Round 201, 217, 221, 222, 242, 255, 256–7, 335, 340, 352, 580–581
 - agriculture 521, 522, 580–581, 583, 588–9
 - coalition behaviour 512, 514, 522
 - computer services classification 374–5
 - demographics and labour markets 443

- developing countries 512, 514, 521–2, 524
 - single undertaking rule 588–9
 - special and differential treatment 581, 586–8
- development promise of 535
- from Marrakesh to Bali 582–5
- positive listing 385, 387, 406, 408
 - Signaling Conference (2008) 401
- reasons for stalemate 581–97
- domestic regulation and services trade:
 - lessons from PTAs 9–10, 216–42
- GATS and domestic regulation
 - Accountancy Disciplines 220–221, 223–4, 225, 226, 227–8
 - Art VI 218–20
 - potential contents of future disciplines 223–8
 - sectoral disciplines 229–31
 - Working Party on Domestic Regulation (WPDR) 221–3, 224, 225, 226, 228, 234, 236, 241
- outlook and future research agenda 241–2
- PTAs, domestic regulation in 231
 - apparent paradox 238–9
 - bilateral trade agreements 233–5
 - EU-Canada CETA 235–7
 - mega-regional negotiations 237–8
 - NAFTA and Mercosur 231–3
 - regulatory chapters for specific sectors 239–41
- Dominica 513
- Dominican Republic 513
- dotcom crisis (2000–01) 44, 471
- due process 153, 283
- e-commerce 63, 126, 336, 340, 356, 379
 - EU 292, 348–9, 354, 356
 - GATS case law 197, 200, 337–9, 340
 - PTAs 240, 241, 242, 343–8
 - WTO work Programme 339, 340, 341–2, 344, 348–9, 354, 368
 - see also* cross-border data flows; digital trade
- e-government projects 345
- East African Community (EAC) 510, 562
- Eastern Europe 453, 472
 - see also individual countries*
- EC – Asbestos 210
- EC – Bananas 194–6, 207
- EC – Chicken Cuts 199
- EC – Computer Equipment 198
- economies of scale 531, 574
- ECOWAS (Economic Community Of West African States) 178, 510
- Ecuador 513, 517, 572
- education 61, 67, 158, 167, 185
 - business services VCs and emerging economies 462, 468, 471, 473
 - demographics and labour markets 420, 423, 425, 426, 435, 437–9, 441, 442, 444, 445
 - international standards 227
 - least developed countries (LDCs) 554, 558–62
 - negotiation stalemate 593
 - policy changes since 2000 34
 - state-owned enterprises 325
- electricity 155–6, 540, 555
- electronic signatures 240, 345
- emerging economies 356, 567, 575
 - business services value chains and 17–18, 448–74
 - conclusions and future challenges 472–4
 - gross trade values 449–53
 - human capital upgrading 462–6
 - upgrading: conceptual framework 459–62
 - upgrading trajectories of emerging economies 466–72
 - value-added statistics 453–9
- cross-border data flows 378
- state-owned enterprises (SOEs) 300
- see also* developing countries
- employment 137–40, 510, 557
 - demographics and labour markets: implications for mode 4 trade 17, 412–45
 - labour standards 593
 - state-owned enterprises 302–5, 309
- endowment effects 389, 390
- energy provision 126, 148, 156, 603
 - electricity 155–6, 540, 555
- engineering 81, 250, 251, 252, 283, 418, 419, 420, 439

- policy changes since 2000 34
- Science, Technology, Engineering and Mathematics (STEM) demographics and labour markets 419, 423, 425
- enterprise resource management (ERM) 469
- environment 158, 593
- environmental goods 599
- environmental services 155, 156, 603
- Estevadeordal, A. 527
- Ethiopia 130, 538, 549, 554
- European Committee for Standardization (CEN) 280, 283, 291, 292–3, 296–7
- European Economic Area (EEA) 108, 280
- European Free Trade Association 506
- European Union 46, 57, 154–5, 212, 241, 242, 331, 451, 573, 586
 - affiliates of foreign multinationals value added 49–51
 - business services VCs and emerging economies 454, 468
- Central America 240
- Commission 468
 - investment trade policy 213
 - standard-setting 269, 276–7, 279, 280, 281–2, 283, 286, 288, 290–292, 297, 298
- competition law 280
- country of origin principle 284
- Court of Justice of (CJEU) 277–8
- cross-border data flows 365, 367
- culture 340, 342
- data protection 377–8
- demographics and labour markets 418, 423, 424
- e-commerce general principles 348–9, 354, 356
- European Council 287
- European standards organizations (ESOs) 279–83, 285, 286, 287–8, 289–93, 296–8
- free movement 280
 - freedom of establishment 285
 - freedom to provide services 285
- intellectual property 51
- KLEMS database 133, 463
- Market Access database 28
- mutual recognition 277–8, 281, 284, 293
- Parliament 290
- PTAs 506, 527
 - Canada CETA 235–7, 240–241, 257, 319, 326
 - CARIFORUM EPA 240, 570–572
 - Colombia 240
 - Korea 240, 262, 319, 328
 - Peru 240
 - TiSA 326, 351, 352, 402, 407–10, 524
 - TTIP *see below*
- safety standards 292
- service sector regulation 252
- Single European Act 279
- Single Market Act 269, 281, 286, 298
- standard-setting in services 12, 269, 278–84, 296–8
 - external trade policy 286–7
 - home country control 285
 - new Standardization Regulation 269, 287–90
 - prospects for European service standards 290–295
 - quality standards, shift towards 276–8
- Services Directive 269, 281, 284–6, 289, 290, 298
- strengths and weaknesses of standards 294
- TiSA 326, 351, 352, 402, 407–10, 524
- trade effect of heterogeneous provisions in services PTAs 108, 117–19
- TTIP 217, 237–8, 257, 263, 287, 293, 375–6, 527
 - data protection 377–8
 - digital trade 334, 356
 - state-owned enterprises (SOEs) 326–7, 328
- expropriation 214
- externalities 155, 156–8, 531
- Facebook 363, 379
- facility management services 286, 295
- factoryless goods producers (FGP) 55
- favouritism, regulatory 309
- federal states 252, 262, 594
- finance, access to 126

- financial crisis 45, 606
 - policy changes since 2000 30, 32, 38
 - trade costs and GVCs 74
 - financial services 74, 75–7, 82
- financial markets 104
 - prudential regulation 183
- financial services 47, 66, 67, 105, 125, 126, 133, 161, 185, 582, 593
 - Burkina Faso 181, 183
 - cross-border data flows 378
 - demographics and labour markets 419, 420, 439
 - externalities 158
 - financial crisis 606
 - GATS 212, 229, 230–231, 239, 400, 521, 526, 599–600, 604
 - high-risk financial assets 155
 - international standards 226, 249, 251, 252, 295–6
 - legal entity identifier (LEI) 296
 - Lao PDR 178, 181, 183
 - least developed countries (LDCs) 538, 555, 566
 - Liberia 178, 181, 183
 - policy changes since 2000 27, 29, 30, 32, 33, 34
 - privacy and data protection laws 149
 - PTAs 239, 521, 526
 - regulatory cooperation 607
 - state-owned enterprises 311, 324, 325
 - technological developments 161
 - TiSA and digital trade 354
 - trade costs and GVCs 67, 74, 75–7, 81, 82, 83
- Financial Stability Board (FSB) 251, 296
- Fink, C. 105
- first-mover advantages 268, 287, 297, 350, 450
- food products 97, 158
- foreign direct investment (FDI) 26, 38, 109, 112, 149, 153, 154
 - business services value chains (BSVC) 460, 469, 473
 - LDCs 563–7
 - nationality of senior personnel 183
 - professional services 258
 - state-owned enterprises (SOEs) 300
- foreign exchange controls 562
- forum-shopping 340
- framing effects 392, 395–6, 399, 404–5, 411
- France 81, 94
 - affiliates of foreign multinationals 51
 - AFNOR 295, 296
 - state-owned enterprises (SOEs) 300, 305
- François, J. 244
- free-rider problems 400, 443, 570
- G-20 296
 - 2008 Declaration 25
- The Gambia 538, 549
- gambling 158
- GATS (General Agreement on Trade in Services) 39, 61–2, 98, 174, 253–60, 272, 366, 479, 519–22
 - cross-border data flows 359, 366, 367–72, 378–82
 - classification conundrum 374–5
 - exceptions 372–4
 - technological neutrality 368–9, 370, 374, 379
- developing countries: GATS schedules 530–531
- digital trade 335, 336–9, 341, 349, 354–5, 368
- domestic regulation 254–8, 261–2, 264
 - cross-border data flows 372
 - digital trade 336
 - PTAs *see* domestic regulation and services trade: lessons from PTAs
- financial services 212, 229, 230–231, 239, 400, 521, 526, 599–600, 604
- negotiation stalemate 595, 596–7
- ‘no reservation’ rule 391
- notification (Art III:3) 27–8
- positive listing 318, 341, 385, 386–7, 392
- PTAs 527
 - domestic regulation and services trade: lessons from *see separate entry*
 - qualifications 258–9
 - salience effects 400
- SOEs: obligations on monopoly service suppliers 318

- technical standards 223, 224, 255, 272–5
- telecommunications 212, 229–30, 239, 366, 367, 368, 371, 374, 379–80, 400, 493, 521, 526, 599–600, 603
- TiSA 401, 407–10
- uncertainties, clarify 605
- see also* modes of supply
- GATS case law 9, 191–215, 337–9, 340, 379
- conclusion 211
 - dispute settlement remedies 213–15
 - reconsider single undertaking approach 212
- general exceptions and regulation of public interest flexibility 209–11 same approach as under GATT 208–9
- interpretation of members' specific commitments
 - e-commerce 200–201
 - evolutive approach 200–201
 - holistic approach 198–200
 - Vienna Convention on Law of Treaties 197–8, 199, 200
- market access 202
 - closed list of prohibited measures 202–3
 - coverage of de facto restrictions 203–5
 - national treatment and 205–7
- non-discrimination 201, 207–8
- scope of GATS
 - GATT and GATS obligations not mutually exclusive 195–7
 - very broad 192–5
- GATT (General Agreement on Tariffs and Trade) 194, 201, 208–9, 213, 226, 248, 253, 386
- digital trade 335, 336, 341
- GATS and GATT obligations not mutually exclusive 195–7
- product standards 243
- state-owned enterprises (SOEs) 316–18
- General Motors 312
- Georgia 517
- Germany 92, 94, 102–3
 - business services VCs and emerging economies 450, 451–3, 457–8
 - demographics and labour markets 414, 418, 424, 437
- Ghana 135–6, 517
- good governance 91, 154, 162, 185, 366, 372
 - poor governance as restriction to trade 174–7, 473
- Google 358, 376, 468
- governmental authority, services supplied in exercise of 193
- Guatemala 526–7
- Haiti 517
- Hamilton, Alexander 514
- health care/medical services 61, 87, 148–9, 167, 185, 242, 323, 471
 - demographics and labour markets 412, 414, 418–20, 421, 423, 424, 425, 428–9, 441
 - European Union 278, 292–3
 - least developed countries (LDCs) 555, 558–9, 562–3, 571
 - medical records 365
 - negotiation stalemate 593
 - policy changes since 2000 34
 - self-regulation 250
- health insurance portability 241
- Hoekman, B. 257, 262, 592
- homeopathy 293
- Honduras-Canada FTA 235
- Hong Kong 57, 130, 135, 402, 470, 524
- housing 158
- Huawei 470
- Human Development Index 519
- human rights 159, 335
- Hungary 300, 302, 306
 - affiliates of foreign multinationals 51
- I-TIP Services database 26, 28, 31
- IBM 61, 468
- Iceland 57, 402, 405, 524
- ideology 513–14
- immigration *see* demographics and labour markets: implications for Mode 4 trade
- India 40, 57, 130, 144, 145, 526, 567, 583, 586, 587, 609

- business services value chains
 - (BSVC) 450, 451, 453–9, 462–6, 467, 469–71, 472
- cross-border data flows 365, 382
- demographics and labour markets
 - 414, 415, 420, 425, 426, 435, 436–9
 - bilateral agreements 443
 - domestic reforms 601
 - state-owned enterprises (SOEs) 300, 307
 - Life Insurance Corporation 310
 - TiSA 403, 407
- individual well-being 159
- Indonesia 57, 300, 307, 365, 425, 567
 - business services value chains (BSVC) 453–9, 462–6
- industrial processes
 - transfer pricing 54
- industry sector 129, 130, 135, 137
- information
 - advantages 310
 - asymmetric 105, 148, 155, 158–9, 161, 178, 181, 185, 553
 - big data 64, 343, 359, 361
 - flows 161, 346, 348, 353, 358
 - cross-border data flows *see separate entry*
 - gaps 262
 - imperfect 156
 - lack of 590–591
 - optimal 158
 - perfect 158
 - see also transparency*
- information and communication
 - technology (ICT) 90, 124–5, 604
 - cross-border data flows 367, 375, 378, 379
 - demographics and labour markets 421, 444
 - digital trade 345, 348, 350, 354
 - EU standard-setting 287
 - ISO: ICT-related services 295
 - least developed countries (LDCs) 544, 549, 555
- information technology outsourcing (ITO) 449, 450, 460–462, 466–8, 469–70, 471, 472
- Information Technology Agreement (ITA) 336, 342, 350–351
- Infosys 469
- infrastructure, trade-related 150, 593
 - least developed countries (LDCs) 543–9, 556
- Institute of Chartered Accountants of Pakistan (ICAP) 497–502, 503–4
- insurance 35, 133, 152, 181, 230, 471
 - health 241
 - IAIS 250–251
 - least developed countries (LDCs) 538, 562, 566
 - state-owned enterprises (SOEs) 310
- Intel 468, 470
- intellectual property 42–3, 51, 473
 - copyright 54, 332, 333, 346, 362, 364
 - digital trade 335, 354
 - copyright 332, 333, 346, 362, 364
 - India 470
 - measurement 54–5, 56
 - TRIPS Agreement 335, 336
- International Accounting Standards Board (IASB) 250, 251, 273
- International Court of Justice (ICJ) 391
- International Financial Reporting Standards (IFRS) 251, 252
- International Monetary Fund (IMF) 449
- International Organization of Securities Commissions (IOSCO) 250, 251, 257, 273
- International Organization for Standardization (ISO) 247, 248–50, 281, 283, 295–7
 - definition of a standard 270, 271, 276
 - Information Centre 259
 - international standards 226–7, 240, 243, 263, 264, 295–7
 - definition of a standard 270, 271, 276
 - demographics and labour markets 439
 - digital trade 345
 - European standards organizations (ESOs) 281, 296–7
 - GATS 254–5, 259, 260, 261
 - limited activity by ISO on services 248–50

- regulatory/standards-setting bodies
 - 250–252, 253, 257, 273, 281
- TBT Agreement 246–7, 248, 253, 255, 259, 260, 261, 265, 275
 - principles 282–3
 - see also* standard-setting in services:
 - new frontiers in rule-making
- Internet 91, 125, 200, 331, 332–3, 334–5, 336, 343, 354, 356
- Corporation for Assigned Names and Numbers (ICANN) 333
- cross-border data flows *see separate entry*
- developing countries and PTAs 517
- e-commerce *see separate entry*
- GATS case law 337
- governance 356
- least developed countries (LDCs) 544–9, 555
- interpretation of members' specific commitments *see under* GATS
 - case law
- investment 29, 42–3, 149, 400, 531, 605
 - expropriation 214
- Iran 93
- Iraq 517
- Ireland 140
 - affiliates of foreign multinationals 51
- Israel 302, 402, 405, 408, 410, 516, 524
- Italy 94, 414
 - affiliates of foreign multinationals 51
 - demographics and labour markets 418
- Japan 81, 356, 506
 - business services VCs and emerging economies 457–8, 470
- Canada-Japan FTA 235
- demographics and labour markets 414, 420–421, 423–4, 425, 426, 441, 443
 - Singapore-Japan Agreement 443
- intellectual property 51
- Philippines Economic Partnership Agreement 399
- state-owned enterprises (SOEs) 300, 306, 325
- TiSA 402, 405, 408, 524
- Jordan 516
- justice
 - distributional 159
- Kazakhstan 425, 517
- Kenya 517, 562, 575
- knowledge process outsourcing (KPO) 150, 449, 450–451, 460–2, 467, 469, 470, 471, 472
- Korea 414
 - cross-border data flows 365
 - demographics and labour markets 421–3, 425, 426, 443
- OECD 530
- PTAs 443, 506, 515, 516
 - Australia 234, 240
 - Canada 234–5
 - EU 240, 262, 319, 328
 - Singapore 344
 - TiSA 402, 403, 408, 524
 - US 262, 319, 346, 375, 376
- Korea – Beef* 210
- Krajewski, M. 156, 158, 159
- Kuwait 516
- labour markets *see* employment
- Lamy, Pascal 382, 604
- land ownership 164
- Lao PDR 178, 181, 183
- Latin America 402, 450, 453, 469–70, 506–8, 512–13, 515, 516, 517, 532
 - policy changes since 2000 27, 35
 - see also individual countries*
- Latrille, P. 233–4
- Latvia 300
- least developed countries (LDCs) 516, 522, 530, 586–7
 - demographics and labour markets 430–436, 440–441
 - digital infrastructure 544, 555
 - infrastructure upgrading 556
 - regulatory reform and services trade 173–83
 - technical assistance 556, 573–4, 575–6
 - waiver *see* services waiver for least developed countries
- Lebanon 130
- legal system
 - colonialism 148

- liberalization 66, 83, 162, 201, 526–7, 531–2, 580, 609
 - autonomous 29, 38, 39, 521, 524, 603
 - competition law and opening
 - services markets in developing countries *see separate entry*
 - policy changes since 2000: patterns of protection and 25–41
 - re-regulatory process after 87, 92–3, 98, 104–5, 106, 216
 - see also negotiations*
- Liberia 174, 178, 181, 183, 538, 549, 563
- licensing regimes 158–9
- Liechtenstein 402, 524
- literacy 437, 438, 439
- Lithuania 300
- logistics 62–3, 66, 67, 83, 126, 167, 181, 286, 352, 357, 378, 603
 - least developed countries (LDCs) 543, 549–54
 - World Bank's Logistics Performance Index (LPI) 543
- Low, P. 59, 67, 386
- Malaysia 130, 136, 300, 325, 506, 515, 516, 517, 524
- Mali 538, 573
- management system standards (MSS) 277, 298
- managerial skills 150
- Manual on Statistics of International Trade in Services (MSITS) 43, 44, 53, 54, 56, 63, 64
- maritime and port security services 293
- maritime transport 526, 582, 592
 - EU-Canada CETA 240–241
 - International Maritime Organization (IMO) 250, 251
 - least developed countries (LDCs) 538, 549–54
 - policy changes since 2000 33
- market access 105, 198, 200, 202, 217, 223, 230–231, 521, 526, 580
 - behavioural dynamics of positive and negative listing 388, 390, 392, 399, 404, 407, 408, 409–10
 - closed list of prohibited measures 202–3
 - coverage of de facto restrictions 203–5
 - cross-border data flows 370, 378, 382
 - demographics and labour markets 430, 435, 442, 443, 444
 - digital trade 345
 - European Union 280
 - least developed countries (LDCs) 571, 573
 - national treatment and 205–7
 - negotiation stalemate 593, 594, 595–6
 - way forward 599, 601, 603
 - policy changes since 2000 32, 37, 39
 - private sector 593
 - public policy 591
 - standards 248
 - state-owned enterprises (SOEs) 324
 - TiSA 351, 352, 404, 407, 408, 409–10
- market-sharing agreements 230
- Mattoo, A. 234, 253
- Mauritius 130, 524
- measurement 3–4, 42–64
 - fragmentation of services 61–2
 - knowledge and shareconomy 62–3
 - statistical frameworks: revised concepts 53–7
 - factoryless goods producers (FGPs) 55
 - goods sent abroad for processing 54
 - IP-related products 54–5
 - merchanting of goods 55–6
 - merchanting of services 56–7
- trade in value added 57–8
 - servicification of manufacturing 59–60
- trends in services trade patterns 44–53
 - crisis, times of 44–5
 - on the decline 46–7
 - developing/ed regions 45–6, 51
 - foreign affiliates 48–51
 - innovation and intellectual property 51
 - mode 4 (commercial presence) 48–51, 52–3
 - on the rise 48

- medicine *see* health care/medical services
- Mercedes Benz 471
- Mercosur 232–3, 512–13
- Mexico 300, 402, 408, 513, 516, 517, 524, 527
 business services value chains (BSVC) 450, 453–9, 462–6, 467, 472
 NAFTA *see separate entry*
Mexico – Telecommunications 230, 337, 369
- Microsoft 358, 470
- Middle East 44, 441, 508, 516, 517
see also individual countries
- migration *see* demographics and labour markets: implications for Mode 4 trade
- Miroudot, S. 66, 69, 73, 83, 93–4, 154, 524–6, 527
- mobile telephony 342, 359
- modes of supply 61–2, 91, 154, 223, 379, 521, 596
 measurement: collecting information 52–3, 64
- Mode 1 (cross-border supply) 30, 35, 38, 49, 52, 193, 196, 197, 338–9, 369, 412
 China 205–6
 e-commerce 200, 201, 341
 governance 176
 least developed countries (LDCs) 540–557
 local presence requirements 162
 OECD database on bilateral services trade 111
- Mode 2 (consumption abroad) 49, 83, 87, 193, 196, 413
 governance 176
 least developed countries (LDCs) 557–63
 OECD database 111
 online trade 341
 visas 162
- Mode 3 (commercial presence)
 29–30, 35, 36–7, 38, 61–2, 87, 193, 196, 413
 assessing business environment 149
 China 34, 204
 compensation 214, 215
 governance 176
 least developed countries (LDCs) 556, 563–7
 OECD database 111–12
 restrictions on foreign ownership 162
 retail sector 164
 trends 48–51
- Mode 4 (presence of natural persons) 30, 35–6, 38, 49, 87, 193, 196, 400, 522, 592
 collecting information 52–3
 demographics and labour markets 17, 412–45
 governance 176
 least developed countries (LDCs) 538–9, 543, 556, 567–73, 574, 576
 regulatory cooperation 607
 work permits 162
 policy changes since 2000 30, 34, 35–7, 38
- Working Party on Domestic Regulation (WPDR) 222
- Mongolia 425, 506, 516
- monopolies 155, 183, 229, 310, 316, 594
 natural 148, 156
 SOEs 319, 323
 GATS obligations 318
- Montenegro 258
- Morocco 516
- most-favoured-nation (MFN)
 treatment 207, 212, 239, 388, 392, 479
 cross-border data flows 370
 demographics and labour markets 435, 443
 developing countries 505, 526
 digital trade 335, 344, 345, 350, 352, 355
 GATS obligations on monopoly service suppliers 318
 least developed countries (LDCs) 570, 574, 576
 negotiation stalemate: way forward 598–9, 609
 TiSA 352, 355
- Motorola 468, 470

- Mozambique 538, 549, 554
 multimedia services 358
 multinational firms 48–51, 56, 57, 448, 469, 473
 managerial skills 150
 transfer pricing 54
 see also foreign direct investment;
 offshoring; outsourcing
 mutual recognition 227–8, 240, 444, 532
 digital trade 345
 European Union 277–8, 281, 284, 293
 GATS: qualifications 258–9
 least developed countries (LDCs) 555, 562, 571
 Myanmar 554, 563

 NAFTA (North American Free Trade Agreement) 111, 232, 233, 386, 402, 443, 467
 SOE disciplines 318–19
 national security 247, 353, 366, 373–4, 443
 national treatment 198, 200, 202–3, 204, 208, 223, 231, 245, 253–4, 260, 261, 521, 526
 behavioural dynamics of positive and negative listing 388, 392, 399, 404, 405, 406, 408–10
 cross-border data flows 371
 digital trade 344
 market access and 205–7
 negotiation stalemate 596, 599
 public policy 591
 state-owned enterprises (SOEs) 324
 TiSA 352, 404, 405, 406, 408–10
 necessity of domestic regulation 254–6, 261, 262–3, 264, 265, 373
 accountancy services 220–221, 225, 226, 255
 bilateral trade agreements 233, 234, 235
 EU-Canada CETA 236–7
 EU-Korea PTA 262
 NAFTA 232
 paradox, apparent 238–9
 potential contents of future disciplines 224–6
 TBT Agreement 246

 TPP 237
 TPSEP 234, 237
 US-Korea PTA 262
 negative list *see* positive and negative listing
 negotiations 21–2, 39, 41, 82–3, 201, 265, 579–609
 Asia-Pacific 35
 behavioural dynamics of positive and negative listing *see separate entry*
 Chinese SOEs in 315
 constructive ambiguity 206–7, 597
 developing countries: relationship between domestic reforms and 529–32, 533
 from Marrakech to Bali 582–5
 paradox, apparent 238–9
 reasons for stalemate 581
 agreement 596–7
 old methods for new type of barriers 589–96
 old rules for new trading landscape 585–9
 regulatory reform and services trade 152–3, 164–5
 single undertaking negotiating structure 212, 239, 387, 581, 588–9, 609
 special and differential treatment 581, 586–8, 609
 state-owned enterprises 315, 324–7
 way forward 598
 alternative negotiating method 602–4
 plurilateral negotiations 598–602
 regulatory cooperation 606–7
 research 608
 strengthening WTO's 'missing middle' 604–6
 see also Doha Round
 Nepal 517, 538, 554, 563
 network effects 268
 network industries 155–6
 New Zealand 234, 402, 405, 407, 408, 524
 Nicaragua 513
 Nigeria 517, 575

- non-discrimination 201, 207–8, 217, 229, 258, 260, 262, 409–10, 573
- cross-border data flows 370, 371, 373
- demographics and labour markets 429
- digital trade 338, 343, 344, 345, 349
- negotiation stalemate 595–6
- regulatory cooperation 607
- state-owned enterprises 325, 327
 - GATT 316–17
 - TBT Agreement 247, 248
- non-governmental organizations (NGOs) 593
 - Working Party on Domestic Regulation (WPDR) 224
- North America 45–6, 441
 - see also individual countries*
- north-north trade in services 505, 527
 - trade effect of heterogeneous provisions in N-N services PTAs 117–19
- north-south trade in services 48, 527
 - trade effect of heterogeneous provisions in N-S services PTAs 117–19
- Norway 305, 402, 405, 524
- OECD (Organisation for Economic Co-operation and Development) 25, 26–7, 258, 263, 264, 412, 416
 - cross-border data flows 365, 381
 - database on bilateral services trade 107–8, 111–12
 - definition of state-owned enterprises 299
 - Korea 530
 - regulatory barriers to competition 484–5
 - Services Trade Restrictiveness Index (STRI) 72–3, 77–8, 79, 81, 82, 429
 - state-owned enterprises (SOEs) 320–322, 327
 - competitive advantage 309–10
- offshoring 125, 126, 424, 448, 460, 473
 - see also outsourcing*
- oil 299, 312, 316, 515, 517
- oligopolies 607
 - natural 148
- Oman 506
- OPEC 316
- openness
 - European Union 282, 287, 289, 297
 - growth and 149
 - TBT Committee 283
- optional protocols 400
- Oracle 468
- OTT (Over-The-Top) services 359, 361–2
- outsourcing 125, 412, 423, 424, 426, 445, 448
 - business process (BPO) 150, 365, 449, 460–462, 466–7, 468–9, 470–471, 472, 592
 - information technology (ITO) 449, 450, 460–462, 466–8, 469–70, 471, 472
 - knowledge process (KPO) 150, 449, 450–451, 460–2, 467, 469, 470, 471, 472
- Pacific 556
 - Asia- 34–5, 402
 - APEC 258, 264
 - see also individual countries*
- Pakistan 403, 426, 515, 524
 - competition cases: public restraint 486–7, 503–4
 - construction sector 496–7, 503
 - ICAP: minimum fees for audits 497–500, 503–4
 - ICAP: restricting training 500–2, 503, 504
 - LDI International Clearing House 487–94, 503
 - PIA Hajj Fares case (2009) 494–6, 503
 - competition regime 480–482
 - competition advocacy 483–4
 - competitive neutrality 482–3
- Panama 402, 403, 408, 513, 516, 524
- Papua New Guinea 140
- Paraguay 130, 403, 524
- participation
 - European Union 282, 297
 - ISO 283
- patents
 - transfer pricing 54
- paternalism 159, 393

- pensions 412, 414
- personal data 104, 364, 377–8, 468
- Peru 240, 319, 403, 408, 506, 513, 516, 517, 524
- Philippines 150, 399, 425, 426, 437, 468
- PIA Hajj Fares case (2009) 494–6, 503
- Poland 300, 450, 467
- policy changes since 2000: patterns of protection and liberalization 2–3, 25–41
 - conclusion 38–41
 - data used and expected findings 26–30
 - findings 31–7
 - policy implications/suggestions
 - competitiveness of services exports: metrics and policy options 7, 123–51
 - demographics and labour markets 423–7, 441–2
 - managing mobility 442–5
 - supply capacity 442
 - regulation in service sector and comparative advantage in goods 102–6
 - trade costs and GVCs in services 82–3
- political economy 33
- pollution 156–8
 - ‘polluter pay’ policies 158
- Porter, M. 61, 459, 462
- Portugal 300
- positive and negative listing 318, 341
 - behavioural dynamics of *see separate entry*
 - developing countries 260
 - digital trade 341, 352, 353, 355, 356
 - TiSA 324, 352, 353, 355
 - US-led PTAs 345
- postal and courier services 74, 75, 76, 292, 323
 - PTAs 239–40, 242
 - US Postal Services (USPS) 311
- poverty reduction 460, 535
- preferential trade agreements (PTAs) 38, 39, 212, 253, 257, 258, 263, 265, 580
 - behavioural dynamics of positive and negative listing *see separate entry*
 - commercial presence: dispute settlement remedies 213, 214
 - cross-border data flows 372, 375, 381
 - demographics and labour markets 419
 - developing countries 19–20, 30, 348, 400, 505–33
 - four categories of 515–19
 - GATS-plus instruments 519–29
 - number per country 512–15
 - relationship between trade negotiations and domestic reforms 529–32
 - digital trade 240, 241, 242, 343–8, 352, 353
 - domestic regulation and services trade: lessons from PTAs *see separate entry*
 - labour mobility 443
 - least developed countries (LDCs) 553, 570, 574
 - positive and negative integration agreements 108
 - qualifications
 - mutual recognition agreements 258–9
 - state-owned enterprises (SOEs) 318–19, 328
 - trade effect of heterogeneous provisions in 6–7, 107–22
 - data 111–14
 - estimating 109–11
 - estimation issues 114–17
 - results 117–19
- price-fixing 230
- pricing 155, 183, 590
 - monopolistic 156
 - predatory 310
 - state-owned enterprises 310, 323
- prior consultation: domestic regulation 228
- privacy 149, 346, 353, 354, 356
 - big data 361
 - cross-border data flows 358, 361, 364–5, 367, 373, 377–8, 380, 382
 - health-related data 365, 563
 - least developed countries (LDCs) 563

- private regulation 161, 183, 333
 - professional services: transnational 257–8
- private sector 265, 592–3
- privatization 105–6
- productivity 83, 288, 514
 - comparative advantage 85, 86, 87, 94
 - competitiveness 123, 133, 145–7
 - demographics and labour markets 412, 423–4, 426, 439, 445
 - division of labour 67
 - total factor (TFP) 154
- professional services 47, 97, 126–7, 181, 183, 257, 297, 580
 - accountancy 249–50, 429, 468
 - Accountancy Disciplines 220–221, 223–4, 225, 226, 227–8, 255, 256, 257, 272–3
 - international standards 249, 250, 251, 252, 273
 - Pakistan 497–502, 503–4
 - cross-border data flows 358
 - demographics and labour markets 426, 429, 436, 437, 444
 - European Union 286, 293
 - Professional Qualifications Directive 284
 - least developed countries (LDCs) 539–40, 554, 555
 - Mode 4 (presence of natural persons)
 - collecting information 52
 - policy changes since 2000 27, 30, 33
 - regulatory/standard-setting bodies 250, 251, 252, 257, 273, 295
 - transnational private regulation 257–8
 - Washington Accord 251
- property rights 88–9, 149
- proportionality 373
- Prospect Theory 389, 390, 393, 395, 405–6
- protection/protectionism 104, 147, 154, 185, 243, 249, 264, 341, 353, 579
 - cross-border data flows 364, 374
 - demographics and labour markets 429–30
 - on goods: indirect impact on services trade 82–3
 - negotiation stalemate 591, 592, 593, 594
 - non-trade values 593
 - policy changes since 2000: patterns of liberalization and 25–41
- public goods 155, 158
- public interest 159, 208–11, 593
 - European Union 289
 - evolutive approach 201
 - market access 204
- public policy 531, 591
 - GATS 372–4
 - case law 201, 209–11
- public procurement 261, 291, 294, 310, 324, 401, 574
- Qatar 516
- qualifications 87, 258–9
 - demographics and labour markets 427, 428–9, 442
 - EU: Professional Qualifications Directive 284
 - least developed countries (LDCs) 554, 555, 562, 571, 573
- quality standards 473, 562
 - European Union 276–8, 285–6, 298
- shift towards 275–8
- rational choice *see* behavioural
 - dynamics of positive and negative listing
- reference papers 400
- regional agreements *see* preferential trade agreements (PTAs)
- Regional Comprehensive Partnership agreement 153
- regulation in service sector and comparative advantage in goods 5–6, 85–107
 - comparative advantage
 - empirical set-up 95–7
 - in goods and services 88–91
 - regulatory 98–102
 - regulatory capacity as source of 91–7
 - services as inputs to goods 93–5
 - policy implications 102–6
- regulatory assessment of services trade and investment (RASTI) 149, 163–8, 174–85

- regulatory cooperation 606–7, 609
- regulatory impact assessments (RIAs) 165, 238, 263
- regulatory policy and trade barriers 147
- regulatory reform and services trade:
 - methodology for developing countries 7–8, 92–3, 99, 152–86
 - assessing services trade and investment regulations 162–4
 - coordination of assessment 167–8
 - coverage of assessment 167
 - level of analysis 165–6
 - modules 168–73
 - objectives of assessment 164–5
- preliminary findings 173
 - adjusting methodology and expectations 173–4
 - formal horizontal restrictions fading 178–81
 - formal sectoral restrictions 181–5
 - poor governance as restriction to trade 174–7
- rationale for regulations 155–61
 - non-economic 159–60
 - regulatory failure 161
- regulation and services trade
 - link between 153–5
- reinsurance 35
- Republic of Congo 140
- research and development (R&D) 67, 469, 470, 471, 473, 538
- retailing services 164
 - cross-border data flows 358, 360
 - demographics and labour markets 420, 425
 - externalities 158
 - policy changes since 2000 27, 30
- road traffic regulation 159
- Roy, M. 98, 99, 524
- rule of law 88, 89, 90, 91, 154, 218
- Russia 300, 307, 521, 567
 - business services value chains (BSVC) 450, 453–9, 462–6, 468
- Rwanda 538, 544, 554, 562
- Sáez, S. 123, 127, 149, 151, 153, 462
- safety 558
 - regulations 184
 - standards: EU 292
- St Lucia 513
- St Vincent and the Grenadines 513
- salience effects 400
- Samsung 468
- Sanitary and Phytosanitary (SPS) Agreement 219, 228, 243, 244, 264, 265
- Saudi Arabia 57, 300, 516
- Sauvé, P. 386, 392, 400, 593, 605
- Science, Technology, Engineering and Mathematics (STEM)
 - demographics and labour markets 419, 423, 425
- security services 293
- self-financing 563
- self-regulation 250, 345, 485, 486, 487, 502, 503
- Senegal 538, 554, 563
- services waiver for least developed countries 20–21, 535–77
- Mode 1 (cross-border supply) 540–543
 - business services 554–6
 - infrastructure 543–9
 - tourism 556–7
 - transport and logistics services 549–54
- Mode 2 (consumption abroad) 557–8
 - capacity to supply services 558–9
 - education services 559–62
 - health services 562–3
 - travel and tourism 559
- Mode 3 (commercial presence) 563–6
 - sectors of export interest 566–7
- Mode 4 (temporary movement of service suppliers) 538–9, 543, 567–71, 574, 576
 - sectors of export interest 571–3
 - performance trends 536–40
- servicification 2, 59–60, 83, 126–7, 333, 510, 600
- shared service centres 469, 471
- sharing economy 63
- Sierra Leone 538, 554
- Singapore 57, 140, 234
 - ASTEP 234
 - demographics and labour markets 443
 - Singapore-Japan Agreement 443

- PTAs 506, 515, 516, 524, 527
 - Australia 344
 - Korea 344
 - US 319, 323, 328, 329–30
- single undertaking negotiation
 - structure 212, 239, 387, 581, 588–9, 609
- skilled labour supply 88, 89–90, 106, 154
 - assessing level and availability of specific skills 149–50
- business services value chains (BSVC) and emerging economies 450, 459, 461–6, 467, 469, 471, 473
- demographics and labour markets 412, 416, 418–21, 423, 424, 425–6, 428–9, 442, 443, 444, 445
 - Bangladesh 440–441
 - India 437–9
- least developed countries (LDCs) 544, 549, 550, 554, 555, 558–9, 567
- managerial skills 150
- Skype 362
- Slovenia 305
 - affiliates of foreign multinationals 51
- small businesses from developing countries 600
- small- and medium-sized enterprises (SMEs) 57, 273, 289, 358
 - cross-border data flows 360, 362, 378, 382
 - costs of data regulation 365, 382
- demographics and labour markets 423
 - least developed countries (LDCs) 544, 566, 576
 - negotiation process and 592–3
- social and cultural integration 443
- social networks 358, 359, 362
- social protection 167
- social security 87, 412, 414, 571, 572
- social services
 - European Union 278
 - international standards 227
- soft law 276, 285, 298
- South Africa 40, 133–4, 300, 307, 407, 467, 575
 - South America 44
 - see also individual countries*
 - South Asia 414, 435
 - skill endowments 150
 - see also individual countries*
 - south-south trade in services 48
 - PTAs 400, 505, 527
 - sovereignty 515
 - Spain 573
 - affiliates of foreign multinationals 51
 - demographics and labour markets 418
 - special and differential treatment 581, 586–8, 609
 - Sri Lanka 425, 517
 - standard-setting in services: new frontiers in rule-making 11–12, 268–98
 - concepts 270–5
 - European Union 12, 269, 278–84, 296–8
 - external trade policy 286–7
 - new Standardization Regulation 269, 287–90
 - prospects for European service standards 290–5
 - quality standards, shift towards 276–8
 - Services Directive 269, 281, 284–6, 289, 290, 298
 - fitness for purpose 271, 276
 - international dimension 295–7
 - quality standards, shift towards 275–8
 - standards
 - international *see separate entry*
 - standard-setting in services: new frontiers in rule-making 11–12, 268–98
 - technical *see separate entry*
 - standstill obligation 604
 - state-owned enterprises (SOEs) 12–13, 156, 183, 185, 299–330, 531
 - challenges raised by
 - examples of distortions 310–311
 - government practices: competitive advantage 309–10
 - overview 307–9

- China 300–302, 306, 307, 311–12
 background 312
 examples of distortions of
 competition 310, 311
 SASAC, role of 312–15
 in trade negotiations 315
 current negotiating efforts 324
 TiSA 326, 328
 TPP 325, 328
 TTIP 326–7, 328
 definition 299
 distribution of 305–6
 employment and 302–5, 309
 existing trade rules 316
 FTAs 318–19, 328
 GATS obligations on monopoly
 service suppliers 318
 GATT obligations 316–18
 in global economy 300–302
 importance in services 306
 in world markets 307
 in world trade 307
 other disciplines 320
 Competitive Neutrality
 Framework (CNF) 321–3,
 325
 SOE Guidelines 320–321
 Pakistan
 construction sector 496–7, 503
 PIA Hajj Fares case (2009) 494–6,
 503
 recommended disciplines on
 323–4
 state-supported enterprises (SSEs) 299,
 319, 323–4, 325, 326–7
 statistics 474, 590–591, 608
 measuring trade in services in world
 of global value chains *see*
 measurement
see also databases
 status quo bias and default rules
 396–7, 398, 405, 406, 411
 Stephenson, S. 527
 Stiglitz, J. 158, 159
 subsidiarity 573
 subsidies 261, 309, 317–18, 324, 425
 Sudan 562, 563
 supply chains, global 29, 38, 357, 602
see also value chains, global
 surveillance 373–4
- Sweden 59, 470
 National Board of Trade 357, 365
 Switzerland 280, 352–3, 354, 355
 China FTA 235
 intellectual property 51
 notifications (GATS, Art III:3) 28
 TiSA 403, 405, 408, 410, 524
 systemic risk 296
- Taiwan 402, 408, 524
 ASTEP 234
 Tanzania 562, 563
 Tata Consultancy Services (TCS) 469
 taxation 87, 567
 least developed countries (LDCs)
 555, 558, 566, 571, 572
 state-owned enterprises 309, 322
 transfer pricing 54
- technical barriers to trade agreement
 for services 10–11, 243–65
 current GATS regime 253
 domestic regulation 254–8, 264–5
 national treatment 253–4
 qualifications 258–9
 re-cap 260
 transparency 259–60
 least trade restrictive principle 246,
 248, 254, 262, 264, 265
 services trade and regulation 247–53
 TBT Agreement 243–4, 259–60, 261,
 264–5
 goods trade 245–7, 255
 TBT analogue for GATS 261–4
 obstacles to regulatory
 cooperation 262
- Technical Barriers to Trade (TBT)
 Agreement 219, 227, 228, 243–4,
 264–5, 288
 goods trade 245–7, 255
 international standards 246–7, 248,
 253, 255, 259, 260, 261, 265, 275
 principles 282–3, 298
 national enquiry point 259
 transparency 259–60
- technical standards 159, 221, 222, 223,
 224, 255, 272–5
 EU–Canada CETA 235–7
 least developed countries (LDCs)
 555
 quality standards 275–7

- technological neutrality 338–9, 341, 344, 348, 354
 - cross-border data flows 368–9, 370, 374, 379
- telecommunications 87, 97, 104, 105, 126, 582, 593
 - cross-border data flows 360, 366, 367, 368, 371, 374, 378, 379–80
 - digital trade 336, 341, 345, 350, 351
 - externalities 158
 - GATS 212, 229–30, 239, 366, 367, 368, 371, 374, 379–80, 400, 493, 521, 526, 599–600, 603
 - infrastructure 150, 183
 - International Telecommunications Union (ITU) 250, 251, 252, 361, 544
 - isolated areas 155
 - least developed countries (LDCs) 538, 544
 - monopoly, natural 155–6
 - Pakistan: LDI International Clearing House 487–94, 503
 - policy changes since 2000 27, 29, 30, 33, 34
 - PTAs 239, 242
 - regulatory reform 154, 155–6, 158, 159, 161, 178, 181, 183
 - skill intensive 150
 - standards 159, 272, 280
 - ITU 250, 251, 252
 - state-owned enterprises 323, 324, 325
 - technological developments 161
 - trade costs and GVCs 74, 75, 76
- telecommuting 517
- ternary choice architecture 397, 408–9, 411
- textiles 97
- Thailand 425, 516
- Timmer, M. 72, 457
- TiSA (Trade in Services Agreement) 39–41, 217, 237, 241, 242, 257, 522–4, 584, 588–9, 601–2
 - behavioural dynamics of positive and negative listing 393, 401–6
 - compromise effects 407–11
 - cross-border data flows 376, 377
 - digital trade 351–5, 356
 - least developed countries (LDCs) 574
 - state-owned enterprises (SOEs) 324, 326, 328
- Togo 538, 554
- Tokyo Round 245
- tort law 159
- total factor productivity (TFP) 154
- tourism 83, 181, 592, 603
 - adventure 158
 - digital trade 352
 - externalities 158
 - least developed countries (LDCs) 556–7, 558, 559, 566, 571
 - policy changes since 2000 33, 34
 - standards
 - EU 285, 286, 292
 - international 226, 295
- trade costs and global value chains 4–5, 66–83
 - dataset and statistical issues
 - OECD Services Trade Restrictiveness Index (STRI) 72–3
 - World Input-Output Database (WIOD) 72
 - econometric analysis
 - barriers to trade in services and trade costs 77–82
 - estimating trade costs
 - gravity 68–9
 - intermediate and final services 70–72
 - findings for period 1995–2011 73–7
 - policy implications 82–3
 - role of services
 - services links 67
 - services value chains 67–8
 - value adding activities 67
- trade in services negotiations *see* negotiations
- training 67, 89, 99, 150, 159, 468
 - accountancy 500–502, 504
 - demographics and labour markets 416, 423, 425, 429, 435, 439, 441, 442, 444
 - institutional capacity 161
 - least developed countries (LDCs) 554, 559, 571, 573
- Trans-Pacific Partnership (TPP) 153, 217, 237, 257, 263, 527–9
 - cross-border data flows 375, 376–7

- digital trade 334, 356
- state-owned enterprises (SOEs) 319, 323, 325, 328
- Trans-Pacific Strategic Economic Partnership Agreement 234, 237
- transaction costs 148, 159, 275
 - behavioural dynamics of positive and negative listing 386, 388, 389, 398–400, 404, 405, 406, 411
- Transatlantic Trade and Investment Partnership (TTIP) 217, 237–8, 257, 263, 287, 293, 375–6, 527
 - data protection 377–8
 - digital trade 334, 356
 - state-owned enterprises (SOEs) 326–7, 328
- transfer pricing 54
- translation services 295
- transparency 259–60, 263, 406, 411, 592, 604–5
 - accountancy services 221, 255
 - cross-border data flows 370
 - digital trade 336, 347, 348, 354
 - European Union 282, 285, 287, 289, 297, 298
 - ISO 283
 - policy changes 25, 38
 - potential contents of future disciplines 228
 - regulatory reform and services trade 152, 153, 161, 162, 165, 176, 181–3
 - state-owned enterprises (SOEs) 309, 319, 321, 327
 - Technical Barriers to Trade (TBT) Agreement 259–60, 283
- transport services 46, 66, 67, 97, 125, 126, 133, 148, 522, 580
- air 193, 252, 352, 526, 538, 549, 557
 - PIA Hajj Fares case (2009) 494–6, 503
 - regulatory/standards-setting bodies 250, 251
- competition law 155
- cross-border data flows 358
- demographics and labour markets 421
- externalities 158
- infrastructure 150
- least developed countries (LDCs) 538, 544, 549–54, 566
- maritime 526, 582, 592
 - EU-Canada CETA 240–241
 - IMO 250, 251
 - least developed countries (LDCs) 538, 549–54
 - policy changes since 2000 33
 - negotiation stalemate 593
 - outside scope of GATS: certain air 193
 - policy changes since 2000 27, 29, 30, 33, 34
 - regulatory reform and services trade 155, 158, 161, 167, 178, 181, 184
 - regulatory/standards-setting bodies 250, 251, 295
 - road 250, 251
 - trade costs and GVCs 74, 75, 76, 83
- travel costs 124–5
- travel services 46, 133, 150
 - least developed countries (LDCs) 538, 559
- TRIPS (Trade-related Aspects of Intellectual Property Rights) Agreement 335, 336
- trust 154
- Turkey 133–4, 241, 403, 405, 407, 408, 410, 524
 - business services value chains (BSVC) 453–9, 462–6
- Twitter 363
- Uganda 559–62, 567
- unfair and inequitable treatment 214
- United Kingdom 94, 144, 425, 437
 - BSI (British Standards Institution) 283, 295, 296
- United Nations 375, 412
 - Conference on Trade and Development (UNCTAD) 25, 538
 - Economic Commission for Europe (UNECE) 250, 251
 - Human Development Index 519
 - Services Database (UNSD) 108, 112
 - Trade in Services Database (TSD) 108, 112, 449

- UNCITRAL Model Law on Electronic Commerce 240
- United States 81, 94, 212, 262, 451, 583, 586
- ANSI 295
- anticompetitive behaviour 493
- business services VCs and emerging economies 450, 451–3, 457–8, 467–8, 469, 470, 472
- Census Bureau 412
- cloud computing 360
- cross-border data flows 367, 376, 377, 382
- culture 340, 342
- demographics and labour markets 412, 415, 416, 418–20, 423, 425, 429, 436–7
- e-commerce general principles 348–9, 354, 356
- foreign affiliates of US multinational enterprises 49
- intellectual property 51
- International Trade Commission (USITC) 343
- NAFTA *see separate entry*
- National Foreign Trade Council 355
- professional services: sub-national regulation 252
- PTAs 344, 345, 348, 400, 506, 527
 - Australia 319, 527
 - Canada 527
 - Central America 526–7
 - Chile 319
 - Colombia 235
 - Korea 262, 319, 346, 375, 376
 - Peru 319
 - Singapore 319, 323, 328, 329–30
 - TiSA *see below*
 - TPP 237, 325
 - TTIP *see below*
- regulatory cooperation 262
- regulatory quality and trade opening 92
- state-owned enterprises (SOEs) 311, 312, 318, 325, 326
- TiSA 326, 351, 402, 403, 404–5, 407, 408, 409–10, 524
- TPP 237, 325
- TTIP 217, 237–8, 257, 263, 287, 293, 375–6, 527
 - data protection 377–8
 - digital trade 334, 356
 - state-owned enterprises (SOEs) 326–7, 328
- US Postal Services (USPS) 311
- USTR 377, 493
 - National Estimate of Foreign Trade Policy Barriers 28
- Universal Postal Union (UPU) 28
- Uruguay 403, 524
- Uruguay Round 219, 245, 255, 334, 336, 512, 522, 530, 582, 587, 588, 598–9, 603
- US – *Gambling* 197, 198, 199, 200, 202, 203–4, 209–10, 256, 337–9, 340, 369, 404
- value chains, global 126–7, 247, 331, 510, 600
 - business services VCs and emerging economies 17–18, 448–74
 - measuring trade in services in world of *see* measurement
 - trade costs and 4–5, 66–83
- van der Marcel, E. 77, 89, 95, 133, 154, 253
- Venezuela 103, 513, 517
- vertical integration 29
- Vienna Convention on the Law of Treaties 197–8, 199, 200
- Vietnam 325, 365, 425, 506, 516
- virtual manufacturing 55
- visas 427, 428, 429, 558, 559, 562, 571, 572, 575
- voids, regulatory 184
- Volkswagon 471
- waiver *see* services waiver for least developed countries
- water industry 155–6, 593
- well-being, individual 159
- work permits 427, 428, 559, 571, 572, 575
- Working Party on Domestic Regulation (WPDR) 221–3, 224, 225, 226, 228, 234, 236, 241, 255, 261, 264, 272, 275, 595
- World Bank 26–7, 28, 33, 72, 163, 263
 - Doing Business Indicator (DBI) 519, 538, 540, 567

- least developed countries (LDCs)
 - 538, 540, 544
 - regulatory assessments 173, 174
 - Regulatory Quality Index 92, 99
 - Services Trade Restrictiveness Index (STRI) 91–2, 96, 97, 249, 538
- World Economic Forum
 - Network Readiness Index (NRI) 543
- World Input-Output Database (WIOD) 72, 453, 454, 462
- World Intellectual Property Organization (WIPO) 333
- World Trade Organization (WTO) 25, 28, 38, 39, 41, 335
 - China 34, 448, 521, 530
 - developing countries 30
 - dispute settlement 214–15, 336–9, 340, 381
 - GATS case law *see separate entry*
 - Doha Round *see separate entry*
 - Liberia 174
 - RTA-IS database 112
 - Secretariat 263
 - Statistics Database 449
 - Trade Policy Reviews (TPRs) 28, 34
 - Uruguay Round *see separate entry*
 - Work Programme on Electronic Commerce 339, 340, 341–2, 344, 348–9, 354, 368
see also individual agreements
- Yemen 549, 559
- YouTube 363
- Zambia 538, 549, 562, 563
- zoning regulations 164

