

Index

- aggregation bias 326, 331
Amiti, M. 211, 260
Andrade da Silva, J. 113, 123–4
antidumping, effect on exports 162–8
Antras, P. 82, 180, 187
Arkolakis, C. 260
Asian Input–Output tables
 (IDE-JETRO) 66, 309
- BACI database 124, 302
Baldwin, R. 179, 296, 333, 338, 340
Barrell, R. 280
Bayoumi, T. 253
BEC concordances and constructing a
 GTAP-MRIO 20–23, 24–5
Belderbos, R. 151
Bems, R. 251, 273
Bergin, P.R. 170
Bernard, A.B. 329
betweenness centrality 303
bilateral trade
 and real exchange rate 257
 and vertical specialization 262
Blair, P. 322
Blonigen, B.A. 151
Bloom, N. 354, 355
Brandt, L. 184, 185
Burstein, A. 242, 260
business approach to international
 supply chain management 296–9
business cycle synchronization 260–71
business statistics and trade data
 329–30
- Caliendo, L. 242
Camarero, M. 280
Campa, J.M. 281
Carare, A. 262
Carlos-Lopes, J. 322
Carrico, C. 29, 91
Cebeci, T. 210
- Cernat, L. 113, 123–4
CGE model and impact of demand
 shocks 84–5, 89–90
Chaney, T. 149, 151, 154
Chen, H. 255
Cheung, Y.-W. 255, 257
China
 antidumping cases 162
 and exchange rate stabilization
 272–9
 exports composition 182–5
 gross exports decomposition 315
 imported input diversity 191–3
 intra-ASEAN trade 349
 processing trade and ordinary trade
 160–62
 production stages 186–91
 production stages and trade growth
 194–202
 production stages and transaction
 exit 202–10
 real exchange rate 253
 trade developments 181–5
 trade flows and real exchange rate
 255–6
 trade policy shocks, impact on
 exports 160–68
Chinese yuan and regional currency
 movements 273–6
Chinn, M. 255, 280, 281, 282
Chor, D. 180, 187
Choudri, E. 259, 260
Cole, M.T. 154
COMTRADE database 19
Costinot, A. 354
currency movements 273–6
current account rebalancing, *see*
 rebalancing
- Daudin, G. 313
Davies, R.B. 154

- De la Cruz, J. 330
- Deardorff, A.V. 170
- Dées, S. 280
- Defever, F. 195
- deficit countries, impact of rebalancing 217, 236–40
- Degain, C. 294, 319, 326
- Dekle, R. 216, 218, 222, 229
- demand and prices, model of world economy 223
- demand-side absorption approach to measuring trade flows 315–17
 compared with supply-side measurement 317–23
- dependent economy 215
- developing countries and global value chains 296
- development policy and trade theory 294
- di Giovanni, J. 242, 262, 263
- Diakantoni, A. 170, 326
- Dietzenbacher, E. 324
- disaster data, EM-DAT database 114–15
- disasters and supply chain vulnerability 81–109
 CGE model 89–90
 GTAP supply chain model 4–6, 89–92
 MRIO analysis 4–5, 83–4
 natural disasters, *see* natural disasters and global supply chains
 Singapore entrepot disruption 88–9, 102–7
- dispersion 359–63
- domestic value added content of exports 312–14
- Dornbusch, R. 215
- double counting 301, 314–15, 316–17, 321
- earthquakes
 Great Tohoku, impact on Japanese car manufacture 112
 Taipei, China, impact on electrical equipment sector 88, 92–101
- Eaton, J. 218, 242
- “Eigenvector Centrality” indicator 303
- electrical equipment sector,
 Taipei, China, impact of earthquake 88, 92–101
- electronics exports, China 182–3
- EM-DAT database 114–15
- entrepot disruption, Singapore, impact on supply chain 88–9, 102–7
- Eora MRIO database 69, 310, 326
- equilibrium in model of world economy 222–5
- Escaith, H. 170, 294, 324, 326
- Ethier, W.J. 294
- Euler, Leonhard 291
- EUROSTAT “Trade by Enterprise Characteristics” project 329
- exchange rate pass-through 258–60
- exchange rate stabilization and Chinese dominance 272–9
- EXIOBASE database 68–9
- exports
 composition, China 182–5
 decomposition into value-added components 313–15, 317–23
 emerging East Asian economies 340–42
 impact of growth 37
 impact of natural disasters 93, 112–14, 129–39
 impact of Singapore entrepot disruption 103–7
 impact of tariff increase 158–68
 upstreamness and stages, China 196
- extensive margin, impact of antidumping 165–8
- external rebalancing, *see* rebalancing
- Factory Asia 338–65
 development of 340–52
 functional supply chain unbundling 352–9
 geographical supply chain unbundling 359–63
- Fally, T. 10, 180
- Feenstra, R. 289, 332
- Fernald, J. 280
- Ferrarini, B. 301, 302
- final and intermediate goods 302
- financial flows 294
- financial risk-transfer and natural disaster compensation 140–41

- Finicelli, A. 247
- food industry, India, impact of tariff reduction 53, 60
- foreign ownership and trade, China 181–2
- Fort, T. 150
- Foster, N. 310
- fractionalization of supply chains 352–9
- fragmentation of production process 288; *see also* trade in tasks; unbundling of supply chains; vertical specialization
- Fratzcher, M. 274–6
- Freund, C. 211
- functional unbundling 352–9
- Fung, V.K. 148
- Galloway, M.P. 94
- Gangnes, B. 211
- Garicano, L. 354
- Gassebner, M. 113, 115, 123–4
- Gaulier, G. 124, 210
- GDP
 - GDP correlation and trade linkages 262
 - impact of income shocks 36–43
 - impact of tariff reduction on intermediate imports 50–52
- Gehlhar, M. 28
- Geoffrion, A. 296–8
- geographical unbundling 359–63
- Gereffi, G. 296
- Ghosh, A. 259
- global inter-industry matrix 86–9
- Global Trade Analysis Project, *see* GTAP
- global value chains 1–3
 - impact of disasters 81–109, 112–41
 - measuring 12–13, 287–332
 - models 289–99
 - unbundling 352–63
 - see also* supply chain vulnerability
- globalization 339–40
- Goldberg, L.S. 281
- Goldstein, M. 254
- Gonguet, F. 294
- Gopinath, G. 259
- Goyal, S. 332, 333
- graph theory 290–93
 - and global value chains 303–4
- Great Tohoku earthquake and tsunami 112
- Grossman, G.M. 288, 296
- GTAP database 16–17, 67, 90, 124
- GTAP-ICIO database 67–8
- GTAP-MRIO 16–18, 23–32
 - data sets 30–32
 - labor categories 29
- GTAP-SC model 5–6, 32–5
 - fixed multiplier model 35–47
 - and impact of disasters on supply chains 89–92
 - and impact of tariff reductions 47–61
 - and income shock 36–43
- GVCs, *see* global value chains
- Hakura, D. 259, 260
- Hale, G. 211
- Hansen, D. 332, 333
- Hanson, G.H. 289
- Head, K. 195
- Hellerstein, R. 259
- Helpman, E. 82
- Herrendorf, B. 219
- Hertel, T.W. 91, 94
- Hillberry, R. 255
- Hodrick–Prescott filter and business cycles 263, 265
- Huang, Y. 274
- Hummels, D. 210, 255, 312
- ICT and production unbundling 352–9
- IDE-JETRO Asian Input–Output Tables 66, 309
- imports
 - China, diversity and sourcing 191–3
 - China, and upstreamness and stages 187–91, 196
 - tariff reduction, impact on GDP 47–61
- impulse response to output gap shock 267–71
- income flows 293–4
- income shocks 36–43
 - impact on employment 43, 47
 - impact on GDP 36–7

- India, food industry, impact of tariff reduction 53, 60
- Inomata, S. 324
- input diversity and sourcing, China 191–3
- input–output analysis, *see* MRIO analysis
- input–output (I–O) tables
 IDE-JETRO 66, 309
 and measuring trade in value-added 309
 OECD 66
- intensive margin, impact of
 antidumping 165–8
- intermediate inputs
 differentiating from final goods 302
 and mapping trade flows 299, 300–309
 and model of world economy 227
 upstreamness and stages 188–91
- international input–output matrices, topological limitation 327–8
- international supply chain management 296–9
- intra-industry trade with ASEAN economies 344–9
- Ito, H. 281, 282
- Japan
 earthquake and tsunami, impact on trade 114
 intra-industry trade with ASEAN economies 344–9
 real exchange rate 253
 wearing apparel imports 26–7
- Johnson, R.C. 179, 210, 251, 255, 256, 313, 314
- Jones, B. 113–14, 124
- Kee, H.L. 149, 193, 211
- Khan, M. 254
- Königsberg Bridge Problem 291
- Konings, J. 170
- Koopman, R. 24, 28, 67, 149, 181, 210, 280, 281, 313, 315, 316, 317
- Koopmans, T.C. 289
- Korea, Republic of
 business cycle dynamics 265–7
 intra-industry trade with ASEAN economies 344, 348, 349
- Kortum, S. 218
- Kose, M.A. 260
- Krugman, P.R. 294
- labor
 GTAP-MRIO categories 29, 91
 non-tradeable sector, impact of rebalancing 235, 236
 and trade 310
- labor force data 227
- Lall, S. 305
- Lanz, R. 366
- Leiter, A.M. 82
- length of supply chains and trade partners' positions 324–5
- Leontief, V. 332
- Levchenko, A. 211, 226, 242, 244, 262, 263
- Li & Fung 148
- Liao, S. 82
- location decisions 359–63
- Long, C. 211
- Lopez-Gonzalez, J. 179
- Los, B. 317
- Lu, M. 195
- Ma, A. 210
- machinery and transport equipment, revealed comparative advantage 322–3
- MacKenzie, C.A. 83, 101, 109, 114
- market clearing, model of world economy 224
- Martin, R. 114
- Maurer, A. 294
- Measuring Globalization* (OECD) 262
- Mehl, A. 274–6
- Melitz, M.J. 149, 151
- Memedovic, O. 300
- Meng, B. 317
- Miller, R. 322
- Miroudot, S. 170
- Mody, A. 262
- Morrow, P.M. 184, 185
- MRIO (multi-region input–output) analysis 4–5, 16–17
 and GTAP-SC analysis 32–61
 and impact of demand shocks 83–9
- MRIO databases 16–23; *see also* GTAP-MRIO

- multiplier analysis, GTAP-SC model 35–47
- natural disasters and global supply chains 6–7, 112–41
 data 114–20
 impact on exports 129–39
 supply chain vulnerability measurement 122–3, 125–9
 Taipei, China earthquake 88, 92–101
- Neiman, B. 259
- network economics 290–94
- “new” new trade theory 295–6
- new trade theory 294–6
- Ng, E.C.Y. 262, 263
- Ng, F. 301
- Noguera, G. 179, 210, 313, 314
- non-tradeable sector
 labor share, impact of rebalancing 235, 236
 total factor productivity estimation 247
- Noy, I. 82
- Nualsri, A. 82
- Nunn, N. 187
- Obstfeld, M. 216, 218, 229
- OECD Input–Output tables 66
- offshoring 359–63
- Okuyama, Y. 83
- Olken, B.A. 113–14, 124
- Oosterhaven, J. 315
- optimal tasks per occupation and occupations per stage 353–5
- ordinary trade and processing trade, China 160–62
- output gaps response to shock 267–71
- ownership of firms, China, and trade 181–2
- Oxley, L. 289
- Park, A. 289–90
- Parro, F. 242
- People’s Republic of China (PRC), *see* China
- pin factory 353–4
- Porter, Michael 298
- Powers, R. 296–8
- PRC, *see* China
- preference non-homotheticity 219
- prices, impact of Taipei, China ELE productivity shock 101
- processing trade 288–9
 China 160–62, 181, 183–5
- product differentiation 306–9
 and value-added approach 328
- product-level trade, China 181–5
 input diversity and sourcing 191–3
 production position 194–202
 and transaction exit 202–10
 upstreamness and stages 186–91
- production stages, China 186–91, 194–202
 and probability of transaction exit 202–10
 sensitivity to trade policy shocks 160
- property rights and attracting supply chain production 364–5
- proportionality method of constructing MRIO database 20
- province-level analysis, effect of antidumping on exports 162–5
- Rajan, R.S. 259
- Ramanarayanan, A. 260
- Rauch, J.E. 309
- real exchange rate
 measurement 250–54
 and rebalancing 233–5
 and trade flows 254–7
- real GDP, *see* GDP
- real income, impact of Taipei, China ELE productivity shock 100–101
- rebalancing 215–41
 impacts on outcomes 229–40
 model 218–28
- rebalancing GTAP-MRIO database 25–8
- revealed comparative advantage, machinery and transport equipment 322–3
- Riaño, A. 195
- Rifflart, C. 297
- Rogoff, K.S. 216, 218, 229
- Romero, I. 324
- Rose, A. 82, 83, 85
- Rossi-Hansberg, E. 288, 296
- Rouzet, D. 170

- Salter–Swan model 215
 Sancho, F. 333
 Schweisguth, D. 297
 sectoral aggregation, BACI and GTAP 146–7
 sectoral impacts of tariff reduction on intermediate imports 52–3
 sectoral productivity estimation 226–7
 services trade, mapping 301
 Shih, Stan 298
 Shikher, S. 242
 shocks, *see* disasters and supply chain vulnerability; rebalancing
 Simonovska, I. 227
 Singapore, entrepot disruption impact on supply chain 88–9, 102–7
 Sleuwaegen, L. 151
 Smith, Adam 353–4
 Smith, G. 257
 socio-economic impact from trade in value-added 310
 Spencer, M. 282
 spillovers and vertical specialization 262
 stages, *see* production stages
 Stehrer, R. 315
 Stelder, D. 315
 Sturgeon, T. 296, 300, 329
 supply chain trade and domestic value-added in exports 343–4
 supply chain unbundling 352–63
 supply chain vulnerability and disasters 81–109, 112–41
 measurement 113, 122–3, 125–9
 supply-side measurement of trade flows 313–15
 compared with demand-side measurement 317–23
 surplus countries, impact of rebalancing 217, 235–6, 236–40
 Świąćki, T. 219
 Taipei, China, business cycle dynamics 267–71
 Taipei, China earthquake
 impact on electrical equipment sector 92–101
 impact on supply chain 88
 Tamarit, C. 280
 Tang, H. 149, 193, 211, 330
 tariff reduction on intermediate imports 47–61
 impact on real GDP 50–52
 sectoral impacts 52–61
 tariff shirking, effects on trade 148–70
 team size, optimal 354
 terms of trade (ToT) impact of ELE productivity shock 99–100
 textile exports, China 182–3
 Thorbecke, W. 253, 257, 281
 Timmer, M. 326
 TiVA (trade in value added) database 66–7, 340
 TOSP (tasks, occupations, stages, products) framework 338, 352–3
 ToT (terms of trade) impact of ELE productivity shock 99–100
 total factor productivity 246–7
 trade
 data 66–9, 124, 329–30
 and environment 310
 and labor 310
 trade balances 228
 Trade by Enterprise Characteristics (EUROSTAT) 329
 trade costs estimation 246
 trade flows
 mapping 300–301
 and real exchange rate 254–7
 trade in tasks 288–9, 295–6, 306, 319–20
 trade in value-added 297–8
 limitations 323–9, 331
 measuring 309–29
 Trade in Value-Added (TiVA) database 66–7, 340
 trade theory 294–6
 tradeable sector relative technology 244–6
 transaction exit and production stage, China 202–10
 Traveling Salesman Problem 291
 Tsigas, M. 29, 91
 Ulrich, K. 150
 UN COMTRADE database 19
 unbundling of supply chains 352–63
 United Kingdom, impact of extreme weather on productivity 114

- United States, tradeable sector
 - technology 245–6
- upstreamness 186–91
- Uy, T. 227
- value-added 293–4, 297–8; *see also*
 - trade in value-added
- value-added content of exports 312–13, 313–14
- value chain restructuring, Li & Fung 148
- Van Assche, A. 210
- Vandenbussche, H. 170
- Venables, A. 333
- vertical specialization
 - and business cycle synchronization 260–63
 - and impact of tariff changes 155–60
 - and trade policy 150–51
 - and trade in value-added 312–13
- Viet Nam, impact of tariff reductions 53
 - motor vehicle and transportation sector 60–61
- Villas-Boas, S.B. 259
- Vitali, S. 332
- Vogel, J. 242
- volatility spillovers and vertical specialization 262
- wages, impact of external rebalancing 232, 235–6
- Walmsley, T.L. 29, 91
- Wang, Z. 211
- Waugh, M.E. 227, 244
- weather extremes, impact on UK
 - productivity 114
- Wei, D. 83, 85
- Weingarden, A. 29, 91
- welfare 225
 - impact of rebalancing 235–6, 236–40
- World Input–Output Database (WIOD) 68, 309
- world trade network and graph theory 291–3
- World Trade Web (WTW) 292
- Yeats, A. 300, 301
- Yi, K.-M. 151, 255, 260
- Yu, Z. 211
- yuan and regional currency movements 273–6
- Zhang, J. 226, 244
- Zignano, S. 124

