

Index

Figures, notes, and tables are indicated by *f*, *n*, and *t*, respectively.

A

- agriculture
 - biotechnology and, 228
 - in China, 32, 33*f*, 33*t*, 35–36, 41, 47–48*f*, 217
 - Doha Round negotiations, 70*n*4
 - in India, 56*f*, 59*f*, 62
 - in low-income economies, 172–73
- apparel industry. *See* textiles industry
- Association of Southeast Asian Nations (ASEAN), 80
- automotive industry
 - in China, 44
 - future prospects, 228
 - in India, 78
 - intraregional and intra-industrial trade in Asia, 74, 76–78, 78*f*, 82*f*

B

- balance of payment (BOP) crisis (1991), India, 4
- Bangladesh
 - clustering in, 216
 - competitive advantage, 99–101, 101*t*, 102*t*
 - EXPY, 108, 109*t*
 - future industrial prospects in, 234
 - intraregional and intra-industrial trade, 79
 - manufacturing and GDP growth in, 170, 172*t*, 173*f*, 175*f*, 183
 - patents, 198
 - product space analysis, 180, 181, 188–89*f*
 - RCA in, 178, 179*t*
 - tertiary education in, 186
 - textiles industry in, 219*n*18
 - top 10 commodities, 178, 179*t*, 180, 188–90*t*
 - trading partners, 179, 183–85*f*
 - U.S. economy, rebalancing of, 205
 - wage rates and productivity in, 88*t*, 90
 - WTO, effects of China's accession to, 125
- biotechnology, 228–29

- BOP (balance of payment) crisis (1991), India, 4
- BPO (business process outsourcing) activities in India, 4–5, 54–55
- Brazil, 44*n*11, 226
- business process outsourcing (BPO) activities in India, 4–5, 54–55

C

- Cambodia, 130, 170, 205
- capital investment and savings. *See* savings and investment
- “cellular” economic model in China, 51–52, 52*t*
- CGE (computable general equilibrium) models, 226*n*3
- China, 1–4, 31–54
 - agriculture in, 32, 33*f*, 33*t*, 35–36, 41, 47–48*f*, 217
 - automotive industry in, 44
 - branding and product category dominance, 213–14
 - “cellular” economic model in, 51–52, 52*t*
 - change in type of manufacturing, 32–34, 34*f*, 35*t*
 - clustering in, 217
 - competitive advantage in. *See* competitive advantage
 - Cultural Revolution, recovery from, 4
 - decentralized approach to, 31–32
 - electronics industry in, 39, 41, 42, 43*f*, 125–26
 - energy costs in, 200
 - export composition and growth, 30*f*, 40–48, 41–44*f*, 45–47*t*
 - fastest-growing manufacturing industries and exports, 94*t*
 - FDI, role of, 4, 18*f*, 65, 98–99, 112–16
 - forecasts regarding, 69–70
 - Foreign Trade Corporations, 4

- China (*continued*)
- future industrial prospects in, 218, 227, 229–36
 - global financial crisis, resilience in face of, 129–30
 - globalization and growth of, 1–3, 2*t*
 - “growth miracle” in, 22–25, 24*t*
 - historical industrialization and growth of, 3–4, 5*t*, 9–11*f*, 12–13, 13–14*f*, 14–16*t*, 31
 - imports, 117–21, 120–21*f*
 - India compared, 54, 55, 56, 59–60, 60*f*, 62, 65
 - India, trade with, 99–100*t*
 - innovation system, building, 32
 - investment and savings in, 10*f*, 15–17, 86, 87*t*
 - Japan, the Republic of Korea, and Germany compared, 38, 40, 44–48, 47*f*, 48*f*, 53, 70
 - long-term growth rates in, 17
 - low-income economies in Southeast Asia, trade with, 179, 184*f*, 186*f*
 - openness to trade in, 23–24
 - organizational capacity and, 51–54, 52*t*, 54*t*
 - patents, 197, 198
 - product space in, 108, 109–10*f*
 - production networks and, 220
 - productivity in, 37–38, 38*f*, 39*t*, 89–91, 89*t*
 - RCA in, 91, 92*t*
 - R&D spending in, 193–96, 211–13
 - savings and investment in, 206, 208
 - SEZs in, 4, 31
 - share of global industrial output and value, 38–39, 39*t*, 40*f*
 - SOEs and COEs, 3*n*6, 52*n*17
 - sources of growth, 36–37*t*
 - Southeast Asia, exports to and from, 170, 171*f*, 171*t*
 - stimulus measures of 2009 in, 6
 - tariff rates, 54, 55*f*, 119
 - tertiary education in, 20, 22*f*, 50–51, 51*t*
 - textiles industry in, 38, 40–42*f*, 42, 125
 - Third Front program, 51
 - top 10 commodities, 95*t*
 - trade dynamics in. *See* trade dynamics in China and India
 - transition from agriculture to industry and services, 32, 33*f*, 33*t*, 35–36
 - TVEs, 31–32
 - upscale commodities with highest density in, 108–11, 111*f*, 112*f*
 - urban focus of, 48–51, 49*t*
 - U.S. economy and, 127, 204, 205
 - U.S., export success in, 80, 86
 - value added in, 13, 25, 29, 30*f*, 33*f*, 33*t*, 37–38, 39*t*, 49, 137
 - wage rates in, 88–90, 88*t*
 - WTO, accession to, 125
- climate change, 209
- clustering of industrial activities, 214–18
- collectively owned enterprises (COEs) in China, 52*n*17
- commodity prices, global, 229, 230–31*f*
- competitive advantage, 91–106
- Bangladesh, 99–101, 101*t*, 102*t*
 - DRC, 95–99, 97–100*t*
 - fastest-growing manufactured exports
 - in Asia, 92, 96*t*
 - in China and India, 91, 94*t*
 - global, 92, 96*t*
 - FDI and, 98–99
 - in high-income economies. *See* high-income economies
 - Korea, Rep., 103–5, 104–6*t*
 - leading industries, 92–93
 - Malaysia, 101–3, 102*t*, 103*t*
 - RCA. *See* revealed comparative advantage
 - shifts in industrial mix, 93–95
 - technological capabilities. *See* technological capabilities and competitiveness
 - top 10 commodities. *See* top 10 commodities
 - trade between China and India, 99–100*t*
- computable general equilibrium (CGE) models, 226*n*3
- Cultural Revolution, China, 4
- ## D
- decentralized approach to manufacturing expansion in China, 31–32
- diversification of exports, 107–12, 109–11*f*, 109*t*, 111–13*t*
- Doha Round, 70, 242
- doing business indicators, 234, 235*t*
- dollar, privileging of, 204*n*5, 232
- DRAM (dynamic random access memory), 81*n*11
- DRC (dynamic revealed competitiveness), 95–99, 97*t*, 98*t*
- drivers of Asian industrial geography, 203–23
- clustering of industrial activities, 214–18
 - FDI and, 204, 208, 218, 221
 - MNCs and, 204*n*3, 213, 217, 218, 220
 - production networks, 218–21
 - savings and investment, 205–11
 - technological change, 211–14

U.S. economy, rebalancing of, 199, 203–5
 value added, 207, 215, 216
 dynamic random access memory (DRAM),
 81*n*11
 dynamic revealed competitiveness (DRC),
 95–99, 97*t*, 98*t*

E

East Asia. *See* Northeast Asia; South, East, and Southeast Asia
 East Asian crisis of 1997–98, 225
 elderly, anticipated rise in, 210
 electronics industry
 in China, 39, 41, 42, 43*f*, 125–26
 clustering in, 215–16
 future prospects, 228, 237–38
 intra-regional and intra-industrial trade in Asia, 74, 76, 78–79, 79*f*, 83*f*
 major technological shifts in, 211
 WTO, effects of China's accession to, 125–26
 energy costs, 200, 219*n*19, 229
 European Union (EU)
 Bangladeshi exports to, 99, 100
 Chinese exports crowding out exports of, 107*n*26
 deficit, need to reduce, 206
 DRC of Chinese and Indian products in, 96, 97–99, 98*t*
 future prospects in, 226, 232, 242
 Korean exports to, 103, 105*t*, 106*t*
 low-income economies in Southeast Asia, as primary trading partner of, 179, 183*f*
 Malaysian exports to, 101
 rebalancing of economy in, 199
 reliance of Asian production networks on markets in, 128
 Southeast Asian trade dynamic shifting to China from, 166*f*
 U.S. economy and, 127
 exports. *See also under* specific countries
 competitive advantage in. *See* competitive advantage
 diversification of, 107–12, 109–11*f*, 109*t*, 111–13*t*
 GDP and export growth, relationship between, 29–31, 30*f*
 “growth miracles,” explaining, 9, 11*f*
 high-income economies. *See under* high-income economies
 investment in export manufacturing, 80–87, 87*t*

low-income economies, 179, 183–85*f*
 middle-income economies. *See under* middle-income economies
 EXPY, 108, 109–11*f*, 109*t*

F

failed states index, 234, 237*t*
 farming. *See* agriculture
 FDI. *See* foreign direct investment
 financial industry, perils of reliance on, 127–28
 flying geese model, 3*n*3
 foreign direct investment (FDI)
 competitive advantage and, 98–99
 development experience of India and China and, 65
 drivers of Asian industrial geography and, 204, 208, 218, 221
 future industrial prospects and, 232, 234, 237, 238–39*f*
 global financial crisis and, 128, 129
 high-income economies and, 136
 historical industrialization and growth in Asia and, 3–4, 16–17, 18*f*, 24
 low-income economies and, 172, 178, 182
 middle-income economies and, 144, 153, 164
 processing trade and (inward FDI), 112–17, 114*t*, 115*f–t*, 117*f*
 technological capacity enhancement as well as, 185
 value added and, 87, 114–17
 Foreign Trade Corporations in China, 4
 free trade agreements (FTAs), 118
 furniture industry and intra-regional/intra-industrial trade in Asia, 74, 79, 80*f*, 84*f*
 future prospects, 199–200, 225–44
 clustering, 218
 concentration of economic activities in China and India (scenario 2), 229–36, 235–37*t*, 238–39*f*
 continuation of current situation (scenario 1), 226–29, 230–31*f*
 FDI and, 232, 234, 237, 238–39*f*
 green technologies, 212, 215, 239–40, 242–43
 in “growth miracle” countries, 22–26, 24*t*
 MNCs and, 234, 237
 new industrial epoch, dawning of (scenario 3), 237–40
 value added and, 233, 240

G

- Gandhi, Indira, 4
 Gang of Four, 4
 garment industry. *See* textiles industry
 GDP. *See* gross domestic product
 General Agreement on Tariffs and Trade (GATT), 118*n*31
 Doha Round, 70, 242
 Kennedy Round, 23*n*28
 Tokyo Round, 23*n*28
 Uruguay Round, 23*n*28, 118
 Germany
 China compared, 22–25, 24*t*, 40, 70
 exports from, 43*t*
 FDI from, 119
 future industrial prospects and, 232
 “growth miracle,” explaining, 6–9, 8*f*, 10–11*f*, 13–14*f*
 long-term growth rates in, 17
 parity of China and India with, 2, 6
 patents, 18, 21*f*, 197*n*21
 tertiary education in, 18, 19*f*
 Ghana, 69
 GLI (Grubel-Lloyd Index) of intra-industry trade, 71*n*6
 global commodity prices, 229, 230–31*f*
 global competitiveness index, 234, 236*t*
 global financial crisis of 2008–09, 1, 6, 90–91, 125–30, 220, 226
 global warming, 209
 globalization and growth, 1, 2*t*, 24–25, 125–27
 Greece, 127*n*6, 232
 green technologies, 212, 215, 239–40, 242–43
 gross domestic product (GDP)
 export growth and, 29–31, 30*f*
 global shares/growth of, 1–2, 2*t*, 5*t*, 125–26, 126*t*
 in “growth miracle” countries, 7–8, 8–9*f*, 13–14*f*
 high-income economies’ manufacturing share, change in, 130–35, 132–37*f*
 investment-to-GDP ratios, 86–87, 87*f*
 low-income economies, slow growth in, 170–73, 172–77*f*, 172*t*, 183–84
 manufacturing expansion and, 29, 30*f*
 middle-income economies, growth of industry as percentage of GDP in, 144, 147*f*, 147*t*
 patents and growth of, 18, 21*f*

- savings as percentage of, 205*n*7
 tertiary education and growth of, 18, 19–20*f*, 21–22, 22–23*f*
 trade growth and, 125–26, 126*t*
 Grubel-Lloyd Index (GLI) of intra-industry trade, 71*n*6
 Gulf War, 54

H

- high-income economies, 130–44. *See also* specific countries
 China, exports from, 136–37, 144*f*
 FDI and, 136
 future industrial prospects for, 235–36
 manufacturing share, change in, 130–35, 132–37*f*
 product space analysis for, 135–36, 137, 138*f*, 140*f*, 142*f*, 144, 145*f*
 RCA in, 130
 top 10 commodities, 135, 139*t*, 141*t*, 143*t*
 Hong Kong, China
 export growth and GDP in, 29, 30*f*
 historical industrialization of, 3
 intra-regional and intra-industrial trade, 78, 79, 80
 tertiary education in, 186
 human capital. *See* tertiary education

I

- ICT (information and communications technology), 4–5, 54–55, 211, 228, 237–38, 240*n*16
 IMF (International Monetary Fund), 54, 126
 imports
 China and India, 117–21, 120–21*f*
 low-income economies, 179, 186–88*f*
 India, 4–6, 54–65
 agriculture in, 56*f*, 59*f*, 62
 automotive industry in, 78
 BOP crisis (1991), 4
 BPO and ITES successes in, 4–5, 54–55, 69, 240*n*16
 China compared, 54, 55, 56, 59–60, 60*f*, 62, 65
 China, trade with, 99–100*t*
 clustering in, 216–17
 competitive advantage in. *See* competitive advantage
 energy costs in, 200
 export composition and growth, 56–62, 56*f*, 57*f*, 60–63*f*
 export growth and GDP in, 30*f*, 225

- fastest-growing manufacturing industries exports, 94*t*
- FDI, role of, 65, 98–99, 116–17, 237
- future industrial prospects in, 218, 229–36
- global financial crisis, resilience in face of, 129–30
- globalization and growth of, 1–3, 2*t*
- growth prospects in, 22, 24*t*, 25
- historical industrialization and growth of, 4–6, 5*t*, 9–11*f*, 13–14*f*, 14–16*t*, 15
- imports, 117–21, 120–21*f*
- Institutes of Technology in, 5*n*10
- investment and savings in, 10*f*, 15–17
- investment-to-GDP ratios, 86, 87*f*
- “License Raj” in, 56, 70
- long-term growth rates in, 17
- low-income economies in Southeast Asia, trade with, 179, 185*f*, 187*f*
- moderate rate of reform and change in, 55–61, 56–61*f*
- patents, 22, 198
- product space in, 108, 110–11*f*
- production networks and, 221
- productivity rates, 58–60, 58*f*, 59*f*, 90
- RCA in, 91, 93*t*
- R&D spending in, 196, 211, 212
- savings and investment in, 206, 207
- sources of growth in, 58*f*
- Southeast Asia, exports to and from, 167–70, 167–70*f*
- stimulus measures of 2009 in, 6
- tariff rates, 54, 55*f*, 119
- tertiary education in, 22, 23*f*, 64*f*, 186
- textiles industry in, 62
- top 10 commodities, 95*t*
- trade dynamics in. *See* trade dynamics in China and India
- upscale commodities with highest density in, 108, 112, 113*f*
- urbanization and, 62–65
- U.S. economy and, 5, 204, 205
- value added in, 25, 56*f*, 58, 60
- wage rates and productivity in, 88*t*, 89*t*, 90
- Indonesia
- clustering in, 216
- export growth and GDP in, 29, 30*f*
- future industrial prospects in, 234
- historical industrialization and growth in, 3
- import of parts and export of assembled materials by, 152*t*
- India, exports to, 167
- intra-regional and intra-industrial trade, 79, 80
- Philippines compared, 158
- product space analysis, 153–54, 156*f*
- production networks, use of, 126
- R&D spending in, 196
- shift from light industries towards electronics and transport, 144, 148*f*
- tertiary education in, 186
- top 10 commodities, 152*t*, 157–58*t*
- industrial geography of Asia, 1–28. *See also* specific countries
- competitive advantage, 91–106. *See also* competitive advantage
- drivers of, 203–23. *See also* drivers of Asian industrial geography
- education and. *See* tertiary education
- export growth and GDP, 29–31, 30*f*
- future prospects for, 199–200, 225–44. *See also* future prospects
- global financial crisis of 2008–09, 1, 6, 90–91, 125–30, 220, 226
- global GDP and trade growth, 2004–2007, 125–26, 126*t*
- globalization and growth of 1995–2008, 1, 2*t*, 125–27
- “growth miracles,” explaining, 6–12, 8–11*f*, 13–14*f*
- high-income economies, 130–44. *See also* high-income economies
- historical background, 3–6
- intra-regional/intra-industrial trade, 71–80. *See also* intra-regional and intra-industrial trade in Asia
- investment. *See* foreign direct investment; savings and investment
- low-income economies, 130, 170–84. *See also* low-income economies
- manufacturing expansion and GDP, 29, 30*f*
- middle-income economies, 130, 144–66. *See also* middle-income economies
- savings. *See* savings and investment
- technological capabilities. *See* technological capabilities and competitiveness
- tiger economies, 3, 7. *See also* Hong Kong, China; Korea, Rep.; Singapore; Taiwan, China
- trade dynamics. *See* entries at trade dynamics
- information and communications technology (ICT), 4–5, 54–55, 211, 228, 237–38, 240*n*16
- innovation, importance of, 17–18, 32

International Monetary Fund (IMF), 54, 126
 intraregional and intra-industrial trade in Asia,
 71–80
 automotive industry, 74, 76–78, 78*f*, 82*f*
 changes in intra-industry trade, 73–74,
 73*f*, 74*f*
 by commodity, 74, 75–77*t*
 competitive advantage, 99–100*t*
 by country and region, 71, 72*t*
 electronics industry, 74, 76, 78–79, 79*f*, 83*f*
 furniture industry, 74, 79, 80*f*, 84*f*
 textiles industry, 74–76, 79–80, 81*f*, 85*f*
 investment. *See* savings and investment
 inward FDI, 112–17, 114*t*, 115*f–t*, 117*f*
 Italy, 232
 ITES (information technology-enabled services)
 in India, 4–5, 54–55, 240*n*16

J

Japan
 Bangladeshi exports to, 100–101
 China compared, 22–25, 24*t*, 38, 40, 44, 47*f*,
 53, 70
 China's export success in, 3
 clustering in, 215
 DRC of Chinese and Indian products in, 96,
 97–99, 98*t*
 export growth and GDP in, 29, 30*f*
 forecasts regarding, 69
 furniture trade in, 79
 future industrial prospects in, 218, 227, 232,
 234, 235–36
 “growth miracle,” explaining, 6–9, 8*f*, 10–11*f*,
 11–12, 13–14*f*
 historical dominance of Asian industrial
 geography, 3
 India compared, 25
 intraregional and intra-industrial trade in
 Asia, share of, 71, 72*f*, 78, 80
 Korean exports to, 103
 long-term growth rates in, 17
 Malaysian exports to, 101, 102
 manufacturing share, change in, 131,
 132*f*, 135*f*
 openness to trade in, 24
 parity of China and India with, 2, 6
 patents, 18, 21*f*, 197, 198
 product space analysis for, 135, 138*f*
 production networks, use of, 126
 R&D spending in, 190–93, 196, 211, 212
 technological capabilities of, 185, 200

tertiary education in, 18, 20*f*, 185–86
 textiles industry in, 131*n*12
 top 10 commodities, 135, 138*t*
 U.S. economy, rebalancing of, 205
 WTO, effects of China's accession to, 125*n*1

K

Kennedy Round, 23*n*28
 Korea, Republic of
 China compared, 22–25, 24*t*, 38, 40, 44–48,
 48*f*, 49, 53, 70
 China, exports from, 136
 clustering in, 215
 competitive advantage, 103–5, 104–6*t*
 export growth and GDP in, 29, 30*f*
 exports from, 43*t*
 forecasts regarding, 69
 future industrial prospects in, 218, 228,
 235–36
 “growth miracle,” explaining, 7, 9–11*f*, 9–12,
 13–14*f*
 historical industrialization of, 3
 intra-regional and intra-industrial
 trade, 78, 80
 investment in export manufacturing in, 81*n*11
 long-term growth rates in, 17
 manufacturing share, change in, 131, 133*f*,
 136*f*, 137
 patents, 18, 21*f*, 197, 198
 product space analysis for, 135–36, 137, 140*f*
 production networks, use of, 126
 R&D spending in, 193, 211, 212
 stimulus measures of 2009 in, 6*n*13
 technological capabilities of, 185, 200
 tertiary education in, 18, 20*f*, 185–86
 top 10 commodities, 135, 141*f*
 U.S. economy, rebalancing of, 205
 WTO, effects of China's accession to, 125*n*1
 Korean War, 8

L

LCDs (liquid crystal displays), thin-film
 transistor, 81*n*11
 lean approach to manufacturing and retailing,
 234–35*n*13
 “License Raj,” 56, 70
 liquid crystal displays (LCDs), thin-film
 transistor, 81*n*11
 low-income economies, 170–84
 agriculture in, 172–73
 exports, 179, 183–85*f*

FDI and, 172, 178, 182
 future prospects for, 234, 235–37*t*,
 238–39*f*
 imports, 179, 186–88*f*
 product space analysis, 178–82, 188–89*f*,
 191*f*, 193*f*
 RCA in, 178, 179–82*t*
 slow growth of manufacturing and GDP
 growth in, 170–73, 172–77*f*, 172*t*, 183–84
 trading partners, 179, 183–88*f*, 184
 value added in, 173*f*

M

Malaysia

China compared, 49
 competitive advantage, 101–3, 102*t*, 103*t*
 export growth and GDP in, 29, 30*f*
 FDI in, 164
 future industrial prospects in, 234
 historical industrialization and growth in, 3
 import of parts and export of assembled
 materials by, 147, 152, 153*t*, 155
 India, exports to, 167
 intraregional and intra-industrial
 trade, 78, 80
 patents, 197, 198
 Philippines compared, 158
 product space analysis, 154–55, 158*f*, 159*f*
 production networks, use of, 126
 savings and investment in, 206, 208
 shift from light industries towards electronics
 and transport, 144, 149*f*
 top 10 commodities, 152, 153*t*, 159–60*t*
 manufacturing expansion and GDP, 29, 30*f*
 Mao Zedong, 4
 Marshall Plan, 7
 mass transport systems in Asia, 209
 middle-income economies, 130, 144–66
 enhancement of export potential by, 162–66
 FDI and, 144, 153, 164
 future prospects for, 234–35
 growth of industry as percentage of GDP, 144,
 147*f*, 147*t*
 import of parts and export of assembled
 materials by, 147–52, 152–55*t*
 natural resources in, 164, 165*t*
 product space analysis, 153–62, 156*f*,
 158–61*f*, 163*f*
 RCA in, 147–52, 152–55*t*
 shift from light industries towards electronics
 and transport, 144–47, 148*f*–151*f*

top 10 commodities, 152–55*t*, 152–59,
 157–62*t*, 164–65*t*
 value added in, 147*f*
 multinational corporations (MNCs)
 in China and India, 5*n*10, 80, 91, 102, 103,
 112*n*29, 117, 234
 drivers of Asian industrial geography and,
 204*n*3, 213, 217, 218, 220
 future industrial prospects and, 234, 237
 in rest of Asia, 126, 129, 147, 164, 237
 Mutual Security Assistance, 7

N

nanotechnology, 228–29, 243
 natural resources in middle-income economies,
 164, 165*t*
 Nepal, 170, 183, 225, 234
 Northeast Asia, 164, 218, 234

O

OECD. *See* Organisation for Economic
 Co-operation and Development
 off-shoring, 24
 Organisation for Economic Co-operation and
 Development (OECD)
 Chinese exports and, 106, 166, 234, 241
 Doha Round and, 70*n*4
 R&D spending in, 196
 reflationary policies, narrowed scope for,
 227–28
 10 fiscal commandments for, 204*n*5
 organizational capacity and industrial
 development in China, 51–54, 52*t*, 54*t*

P

Pakistan

clustering in, 216
 economic hopes for, 69
 EXPY, 108, 109*t*
 future industrial prospects in, 234
 intraregional and intra-industrial trade, 79
 manufacturing and GDP growth in, 170, 172*t*,
 173*f*, 174*f*, 183
 patents, 198
 product space analysis, 180–81, 191*f*
 RCA in, 178, 180*t*
 R&D spending in, 196
 tertiary education in, 186
 textiles industry in, 219*n*18
 top 10 commodities, 178, 180*t*, 181, 192–93*t*
 trading partners, 179, 183–85*f*

- Pakistan (*continued*)
 U.S. economy, rebalancing of, 205
 wage rates in, 88*t*, 90
 WTO, effects of China's accession to, 125
- Patent and Trademark Office, U.S. (USPTO),
 197, 198*t*, 199*t*
- patents, 18–22, 21*f*, 197–99, 198*t*, 199*t*
- Philippines
 clustering in, 216
 export growth and GDP in, 29, 30*f*, 225
 historical industrialization and growth in, 3
 import of parts and export of assembled
 materials by, 147, 152, 154*t*
 Indonesia and Malaysia compared, 158
 intraregional and intra-industrial
 trade, 78, 80
 product space analysis in, 16–161*f*, 158
 shift from light industries towards electronics
 and transport, 144, 150*f*
 tertiary education in, 186
 top 10 commodities, 152, 154*t*, 161–62*t*
- product space analysis
 for China and India, 107–8, 109–11*f*, 109*t*
 for high-income economies, 135–36, 137,
 138*f*, 140*f*, 142*f*, 144, 145*f*
 for low-income economies, 178–82, 188–89*f*,
 191*f*, 193*f*
 for middle-income economies, 153–62, 156*f*,
 158–61*f*, 163*f*
 as technique, 107–8
- production networks, 126, 128–29, 218–21
- productivity
 in China, 37–38, 38*f*, 39*t*, 89–91, 89*t*
 in India, 58–60, 58*f*, 59*f*, 90
 TFP, 17*n*27, 20, 36, 58, 205
 wages and, 87–91, 88*t*, 89*t*
- PRODY, 108, 109–11*f*
- public transport systems in Asia, 209
- R**
- R&D (research and development) spending,
 190–97, 195*t*, 196*t*, 211–13
- RCA. *See* revealed comparative advantage
- relative unit labor costs (RULC), 89
- Republic of Korea. *See* Korea, Republic of
- research and development (R&D) spending,
 190–97, 195*t*, 196*t*, 211–13
- revealed comparative advantage (RCA)
 in China and India, 91, 92*t*, 93*t*
 in high-income economies, 130
 in low-income economies, 178, 179–82*t*
 in middle-income economies, 147–52,
 152–55*t*
- Rodrik, Dani, 107
- RULC (relative unit labor costs), 89
- Russian Federation, 6*n*13, 44*n*11, 226. *See also*
 Soviet Union
- S**
- savings and investment
 as driver of Asian industrial geography,
 205–11
 FDI. *See* foreign direct investment
 in “growth miracle” countries, 10*f*, 15–22,
 19–23*f*
 as trade dynamic in China and India,
 80–87, 87*t*
- Second World War, 7, 8
- SEZs (special economic zones) in China, 4, 31
- Singapore
 export growth and GDP in, 29, 30*f*
 historical industrialization of, 3
 intraregional and intra-industrial trade, 78, 80
 patents, 197
 product space analysis for, 137, 145*f*
 R&D spending in, 193
 tertiary education in, 186
 top 10 commodities, 137, 146*t*
- small and medium enterprises (SMEs), 12, 214
- SMEs (small and medium enterprises), 12, 214
- SOEs (state-owned enterprises) in China, 3*n*6,
 52*n*17
- South, East, and Southeast Asia. *See also* specific
 countries
 future industrial prospects in, 218
 industrial clusters in, 214–15
 tariffs in, 119, 120–21*f*
 trade dynamics in
 overlap with China and India, 167–69*f*,
 167–70, 170–71*t*
 shift from U.S./EU to China, 166*f*
- South Korea. *See* Korea, Republic of
- Soviet Union, 31, 51, 53, 69. *See also* Russia
- Spain, 232
- special economic zones (SEZs) in China, 4, 31
- Sri Lanka
 clustering in, 216
 future industrial prospects in, 234
 intraregional and intra-industrial trade,
 79–80
 manufacturing and GDP growth in, 170–72,
 172*t*, 173*f*, 176*f*, 183

patents, 198
 RCA in, 178, 181*t*
 R&D spending in, 196
 textiles industry in, 219*n*18
 top 10 commodities, 178, 181*t*
 trading partners, 179, 183–85*f*
 wage rates in, 88*t*, 90
 WTO, effects of China's accession to, 125
 state-owned enterprises (SOEs) in China, 3*n*6,
 52*n*17
 stimulus measures (2009), 6
 subprime mortgage market, 126, 127

T

Taiwan, China

China, exports from, 136
 clustering in, 215
 export growth and GDP in, 29, 30*f*
 future industrial prospects in, 218, 235–36
 historical industrialization of, 3
 intraregional and intra-industrial trade, 80
 investment in export manufacturing in, 81*n*11
 manufacturing share, change in, 131, 134*f*,
 136, 137*f*
 patents, 198
 product space analysis for, 135–36, 137, 142*f*
 production networks, use of, 126
 R&D spending in, 211, 213
 technological capabilities of, 200
 top 10 commodities, 136, 143*t*
 tariffs
 in East Asia, 119, 120*f*
 in India and China, 54, 55*f*, 119
 in South Asia, 119, 121*f*
 technological capabilities and competitiveness
 education. *See* tertiary education
 importance of developing, 17–22, 184–85
 innovation, importance of, 17–18, 32
 major new technological shifts, 211–14,
 237–40
 patents, 18–22, 21*f*, 197–99, 198*t*, 199*t*
 R&D spending, 190–97, 195*t*, 196*t*,
 211–13
 tertiary education
 in China, 20, 22*f*, 50–51, 51*t*
 importance of, 18–22, 19–20*f*
 in India, 22, 23*f*, 64*f*, 186
 per capita GDP growth and, 18, 19–20*f*
 savings and investment affected by need for,
 209–10
 in Southeast and East Asia, 185–90, 195*t*

textiles industry

in Bangladesh, 219*n*18
 in China, 38, 40–42*f*, 42, 125
 clustering in, 216
 in India, 62
 intraregional and intra-industrial trade in
 Asia, 74–76, 79–80, 81*f*, 85*f*
 in Japan, 131*n*12
 in Pakistan, 219*n*18
 production networks and, 218, 220
 in Sri Lanka, 219*n*18
 WTO, effects of China's accession to, 125
 TFP (total factor productivity), 17*n*27, 20, 36,
 58, 205

Thailand

clustering in, 215–16
 export growth and GDP in, 29, 30*f*
 FDI in, 164
 historical industrialization and growth in, 3
 import of parts and export of assembled
 materials by, 147, 153, 155*t*
 India, exports to, 167
 intraregional and intra-industrial trade, 78, 80
 patents, 198
 product space analysis, 162, 163*f*
 savings and investment in, 206
 shift from light industries towards electronics
 and transport, 144, 151*f*
 tertiary education in, 185–86
 top 10 commodities, 153, 155*t*, 164*t*, 165*t*
 thin-film transistor LCDs (liquid crystal
 displays), 81*n*11
 Third Front program, China, 51
 tiger economies, 3, 7. *See also* Hong Kong,
 China; Korea; Singapore; Taiwan, China
 Tokyo Round, 23*n*28
 top 10 commodities
 in China and India, 91, 95*t*
 in high-income economies, 135, 139*t*,
 141*t*, 143*t*
 in middle-income economies, 152–55*t*,
 152–59, 157–62*t*, 164–65*t*
 total factor productivity (TFP), 17*n*27, 20, 36,
 58, 205
 township and village enterprises (TVEs), China,
 31–32
 trade dynamics in China and India, 69–124
 competitive advantage. *See* competitive
 advantage
 diversification of exports, 107–12, 109–11*f*,
 109*t*, 111–13*t*

trade dynamics in China and India (*continued*)
 exports. *See* exports
 FDI and processing trade, 112–17, 114*t*,
 115*f–t*, 117*f*
 imports, 117–21, 120–21*f*
 intraregional and intra-industrial trade. *See*
 intra-regional and intra-industrial trade
 in Asia
 investment in export manufacturing,
 80–87, 87*t*
 MNCs and, 80, 91, 102, 103, 112*n*29, 117
 overlap with Southeast Asia, 167–69*f*, 167–70,
 170–71*t*
 wages and productivity, 87–91, 88*t*, 89*t*
 trade dynamics in Southeast Asia
 overlap with China and India, 167–69*f*,
 167–70, 170–71*t*
 shift from U.S./EU to China, 166*f*
 transport systems in Asia, 209
 TVEs (township and village enterprises), China,
 31–32

U

United Kingdom

declining role of manufacturing, need
 to address, 116*n*30
 deficit, need to reduce, 206
 financial industry in, 128
 long-term growth rates in, 17, 19*f*
 tertiary education in, 19*f*

United States

Bangladeshi exports to, 100–101
 China's economy and, 2–4, 127, 205
 China's export success in, 3, 80, 86
 continuing prominence as market, 127, 128
 declining role of manufacturing, need
 to address, 116*n*30
 deficit, need to reduce, 206
 dollar, privileging of, 204*n*5, 232
 DRC of Chinese and Indian products in,
 96–99, 97*t*
 economic hobbling of, 69–70
 future prospects in, 226, 227–28, 241–42
 India's economy and, 5, 204, 205
 Korean exports to, 103
 long-term growth rates in, 17, 19*f*
 low-income economies, as primary trading
 partner of, 179, 183*f*, 184
 Malaysian exports to, 101
 openness to trade in, 24
 parity of China and India with, 2, 6

perceived decoupling of Asian exports
 from, 125
 rebalancing of economy in, 199, 203–5
 Southeast Asian trade dynamic shifting to
 China from, 166*f*
 stimulus measures of 2009 in, 6*n*13
 subprime mortgage market in, 126, 127
 tertiary education in, 19*f*
 USPTO, 197, 198*t*, 199*t*
 urbanization, 48–51, 49*t*, 62–65, 208–9
 Uruguay Round, 23*n*28, 118
 USPTO (U.S. Patent and Trademark Office),
 197, 198*t*, 199*t*

V

value added

in China, 13, 25, 29, 30*f*, 33*f*, 33*t*, 37–38, 39*t*,
 49, 137
 by country, 13, 15*t*
 as driver of industrial geography, 207,
 215, 216
 FDI and, 87, 114–17
 future prospects and, 233, 240
 in India, 25, 56*f*, 58, 60
 in rest of South and East Asia, 137, 147*f*, 173*f*

Vietnam

clustering in, 215, 216
 export growth and GDP in, 29
 future industrial prospects in, 218
 intraregional and intra-industrial
 trade, 79, 80
 investment-to-GDP ratios, 86, 87*f*
 manufacturing and GDP growth in, 170, 173*f*,
 177*f*, 183
 patents, 198
 product space analysis, 178, 181–82, 193*f*
 RCA in, 178, 182*t*
 R&D spending in, 196
 savings in, 206
 top 10 commodities, 178, 182,
 182*t*, 194*t*
 trading partners, 179, 183–85*f*
 U.S. economy, rebalancing of, 205
 wage rates and productivity in, 88*t*, 90

W

wages and productivity, 87–91, 88*t*, 89*t*
 World Development Indicators, 29
 World Trade Organization (WTO), 125, 226*n*3
 World War II, 7, 8
 WTO (World Trade Organization), 125, 226*n*3

ECO-AUDIT

Environmental Benefits Statement

The World Bank is committed to preserving endangered forests and natural resources. The Office of the Publisher has chosen to print *Changing the Industrial Geography in Asia* on recycled paper with 50 percent post-consumer waste, in accordance with the recommended standards for paper usage set by the Green Press Initiative, a nonprofit program supporting publishers in using fiber that is not sourced from endangered forests. For more information, visit www.greenpressinitiative.org.

Saved:

- 17 trees
- 5 million Btu of total energy
- 1,599 lb. of net greenhouse gases
- 7,701 gal. of waste water
- 468 lb. of solid waste



A GREAT BURST OF GLOBALIZATION brought the 20th century to a close, creating upheaval in the world economy from roughly 1995 to 2008. And now, with the new century barely commenced, a second upheaval is in the offing following the severe financial crisis that plunged the global economy into recession in 2008–09. The first upheaval witnessed a massive migration of manufacturing and certain business services that transformed Asia into the industrial heartland of the world. The second upheaval will likely consolidate Asia’s industrial preeminence and could result in a concentration of industrial activities in the two most populous and fastest-growing Asian economies—China and India.

As the two Asian giants become the industrial equals of the United States, Germany, and Japan, the ramifications will affect trade and growth worldwide, the future of development in China and India, and industrialization throughout Asia. *Changing the Industrial Geography in Asia: The Impact of China and India* examines these developments, focusing specifically on China and India. Its analysis and conclusions will be of particular interest to policy makers and academics, as well as anyone with an interest in how China and India are likely to reshape industry throughout Asia.

“Changing the Industrial Geography in Asia is rich in detailed analysis of the continuing transformation of the manufacturing sector in Asia, both in terms of its moving geography and its composition. For those interested in understanding the prospects of post-financial crisis Asia, this book is a must read. It is a refreshing return to economic fundamentals, including the new problems of climate change and dwindling energy resources, and will remain the leading reference on Asian transformation for a long time to come.”

RAKESH MOHAN, Professor in the Practice of International Economics and Finance, Yale School of Management; Senior Fellow, Jackson Institute of Global Affairs, Yale University; former Deputy Governor, Reserve Bank of India

“The authors consolidate a remarkable amount of data and analysis on the industrial structure of Asia and its emergence as the industrial center of the global economy.”

BARRY BOSWORTH, Senior Fellow, The Brookings Institution

ISBN 978-0-8213-8240-0



SKU 18240



THE WORLD BANK