

Index

- Abernathy, F. 27–30
Adam, L. 60, 63
Africa, Sub-Saharan
 aid reform 111–23
 foreign direct investment 85–6
 information technology policies 5–6, 59
 road construction industry 117–19, 128, 131–3
 technology policy 126–39
Africom 102–3
aid donors, information technology projects 88
aid reform, Sub-Saharan Africa 111–23
American Airlines, Internet usage 20
Amsden, A. 50
Antonelli, C. 14, 60
Apte, U. 86
Asia
 clothing industry 30
 information technology policies 58–9
 see also individual countries
athletic footwear industry 31–2
- Ballance, R. 41
Bangladesh
 soap industry 44, 48
 telecommunications 79–80, 88, 91–4, 100
Barff, R. 31, 62
Baron, C. 45
Bayes, A. 91–3
Best, N. 23
Botswana, road construction 119, 131, 136–7
Brazil, poverty 72–3
building material quality, Kenya 133
Burr, C. 100
- Cairncross, F. 15
Cambodia, mobile phones 15
capital-intensive production 128–9
cellular phones *see* mobile phones
cement blocks sector, engineering relationships 45
Chenery, H. 50
Chile, telephone subsidy auctions 88
China
 clothing exports to USA 30
 technology aid to Africa 116–17, 120
circular causation 65
Clark, W. 128
clothing industry 25–32
 engineering relationships 44
 and information technology 62
Colombia, poverty 73
communications technology
 and globalization 73–4
 and international trade 55–6
 low-cost 103–5
comparative advantage 24–38
computers
 low-cost 101–3
 see also information technology
containerization, effect on world trade 12
corDect 100–101
costs
 information technology, developing countries 96–106
 telecommunications, and globalization 55
cumulative causation and information technology 60–65, 76
cumulative gains from low-cost IT 104–5
- decentralization 135–8
Der-Petrossian, B. 133
developing countries
 aid to Africa 116–17, 119–20
 clothing trade 25–32

- and globalization 54–60
- information technology 32–3
- poverty 72–3
- research & development centres 35–7
- telecommunications 3–4, 13–15, 77–83
- transaction costs 12
- see also* individual countries
- Dicken, P. 23, 25
- digital divide 95–6
- digital switching 13–15, 78–9, 59–60
 - India 97–9
- Donaghu, M.T. 31, 62
- donor-recipient interactions 113–23
- Dumas, J. 79
- Dunning, J. 19, 33, 35, 57, 74
- Dymond, A. 77, 78, 79

- Economic Theory and Under-Developed Regions* 60
- Edmonds, G. 131, 133, 134
- education and poverty 73
- electronic commerce 16–18, 82–3
- electronic switching *see* digital switching
- Elson, D. 62
- engineering relationships 42–5
- Enos, J. 121
- Ernberg, J. 82

- FDI *see* foreign direct investment
- FidoNet 103–4
- footwear industry 31–2
- foreign direct investment
 - and globalization 54–5, 83–6
 - and information technology 19–20, 57
- Forstner, H. 41
- Forsyth, D. 42, 48
- Freeman, C. 57, 74
- Friendship Mill 116
- Fuchs, R. 81–2

- Garrity, M. 136
- Gaudette, P. 88
- GDP-trade ratio, developing countries 54–5
- General Electric Corporation, Internet usage 16
- Global Economic Prospects and the Developing Countries* 54

- global research & development centres, India 35–6
- global scanning, multinational firms 33–4
- globalization
 - and communication technology 55–6
 - and developing countries 54–60
 - and foreign investment 54–5, 57
 - and information technology 1–3, 57–65, 73–6
 - of innovation 34–7
- Grainger, W.W. Internet usage 17
- Grameen Telecom 79–80, 91–4, 100
- Green, R. 134, 136
- Greenstar 103
- Guatemala, poverty 73

- Hagedoorn, J. 57, 74
- Hanna, N. 58, 62
- hardware, low-cost 101–3
- Harris, R. 24
- Heckscher-Ohlin model 56
- Higgins, B. 61
- Hirschman, A. 127, 129, 130, 138
- Hirschmanian Latitudes 130–33
- Hoffman, K. 25–6
- Howe, J. 133
- Hudson, H. 99
- Human Development Report* 71, 73–4
- Hyman, E. 137

- IIT (intra-industry trade) 41–51
- India
 - digital exchanges 14, 97–9
 - global R&D centres 35–6
 - rural telecommunications 80, 100–101
 - soap industry 44, 48–9
 - sugar industry 45
 - technical collaboration in Kenya 117
 - technological exports 120
- industrialization, Sub-Saharan Africa 112–13
- information technology
 - and comparative advantage 29, 32–3, 56
 - and cumulative causation 60–65, 76
 - and foreign direct investment 19–20, 57
 - and globalization 1–3, 57–65, 73–6
 - international trade in 56

- low-cost 95–106
 and multinational corporations 33, 57, 74
 and service activities 86–7
 and telecommunications 13–20
 and transaction costs 12–20
 innovation and globalization 34–7
 institutional trait-making, labour-intensive technology 126–39
 Internet
 alternatives to 103–4
 low-cost access 102
 trading 16–18, 82–3
 and transaction costs 15–20
Internet Economic Toolkit for African Policy Makers 5–6
 intra-industry trade (IIT) 41–51
- James, J. 29, 47, 56
 Jensen, M. 16
 Johnston, T. 113, 114, 115, 120
- Kayani, R. 77, 78, 79
 Keesing, D. 50
 Kenya
 cement blocks industry 45, 47
 road construction 118–19, 122–3, 131–4
 technical collaboration with India 117
 Kerstens, B. 41
 Khatun, H. 92
 Kibati, M. 100
 Kilby, P. 46–7
 Korea
 industry innovations 49
 South, digital switching 14, 60
 Krugman, P. 56
- labour-intensive technology 84–6, 126–39
 road construction 117–19, 131–34
 Lall, S. 112–13
 lean retailing 29, 30
 leapfrogging, technological 13–14, 59–60
 Lesotho, exports 85–6
 LINCOS project 105
 Linux, benefits for developing countries 102
 low-cost information technology 95–106
 Lucent Technologies 15
 machine tool sector, Taiwan 50
 maize milling sector, Tanzania 45
 Malaysia, electronic switching 14
 Manor, J. 136
 Mason, R. 86
 Mauritius, foreign investment 85
 McCutcheon, R. 118, 123, 131, 136
 mobile phones
 Bangladesh 79–80
 developing countries 15
 Moorthy, V. 117
 Mubin, A. 48
 Mukandala, R. 114
 multinational corporations
 global scanning 33–7
 and information technology 19–20, 33, 57, 74
 Musonda, F. 60
 Myrdal, G. 60–61, 65, 71, 76
- Narula, R. 19, 33, 35, 57, 63, 74
 New Deal Inc. 101–2
 New Internet Computer 102
New Palgrave Dictionary of Economics 11–12
 Ngoro, B. 103
 Nike 37, 62
 North-South intra-industry trade 41–51
 Norton, S. 13
- oil processing sector, Tanzania,
 decentralization 137
 online trade 16–28, 82–3
- Pack, H. 126
 Pan African Paper Mills (PPM) 117
 PEOPLink 82–3
 Philippines, use of Linux 102
 Phillips, D. 135–6
 phones *see* telephones
 phoneshops 79–80
see also telephones
 Picard, L. 135, 136
 pilot projects, and risk reduction 133–4
 Pitroda, S. 78–9, 80, 97–8
 Pondicherry, Village Information Project, India 101
 poverty 71–3
 PPM (Pan African Paper Mills) 117
 private sector decentralization 137–8

- pro-poor technical integration 3-5,
77-88, 91-4
- pro-rich globalization patterns 75-6
- procurement process, and the Internet
15-19
- product cycle theory 23-7, 32-8
- product proliferation 34, 38
- clothing industry 27-32
- product quality latitudes 131-3
- public sector decentralization 135-7
- quality latitudes 131-3
- Qvortrup, L. 81
- RARP (Rural Access Roads Programme)
118-19, 122-3, 131-4
- recipient passivity 113-14, 120-22
- Reddy, P. 34
- research and development
- centres, India 35-6
- spending, Africa 121
- rice-milling sector, engineering
relationships 44
- road construction, Africa 117-19, 122-3,
131-4, 136-7
- Rosenberg, H. 46
- Rural Access Roads Programme, Kenya
(RARP) 118-19, 122-3, 131-4
- rural telecommunications 78-82
- Rush, H. 25-6
- Ruud, O. 131, 134
- Safioleas, S. 37, 64
- satellite communication, and developing
countries 99
- Sawyer, C. 41
- Senegal, telephone privatisation 88
- service activities, and information
technology 86-7
- Silverman, J. 138
- Simputer 102
- skills shortage, supervisory 128
- soap industry, engineering relationships
44, 47-9
- software, low-cost 101-3
- solar power, developing countries
103
- South Korea, electronic switching
technology 14, 60
- state centralization, Africa 135-7
- state-owned enterprises, Tanzania,
 impact of aid 113-14
- Stewart, F. 45, 46, 47, 112, 115
- Stock, E. 117-18, 128, 132, 134, 135
- strategic alliances 64
- Sub-Saharan Africa *see* Africa, Sub-
Saharan
- sugar industry, engineering relationships
45
- supervisory skills shortage 128
- Suri, K. 49
- sustainable software 101
- Swaminathan Research Foundation 101
- switching equipment, digital 13-15,
78-9, 97-9
- Taiwan, machine tool exports 50
- Talero, E. 88
- Tanzania
- bakery project 136
- Internet use 16
- maize milling sector 45
- oil processing industry 137
- organisational skills shortage 128
- rice-milling sector 44
- state centralization 135-6
- state-owned enterprises, impact of aid
 113-14
- technological aid from China 116-17
- Tanzania Regent Clearing and
 Forwarding (TRCF) 16
- technical integration, pro-poor 3-5,
77-88
- technological aid 119-22
- technological leapfrogging 13-14, 59-60
- technology policy, Sub-Saharan Africa
5-6
- telecentres 81-2
- telecommunications
- developing countries 3-4, 77-82,
 87-8
- and information technology 13-20
- technology
- and globalization 59-60
- low-cost 96-101
- and trade 55
- see also* telephones
- telephones
- Bangladesh 79-80, 91-4
- developing countries 3-4, 97

- India 97-9
- temporal latitudes 130
- Texas Instruments 19
- textile industry 25-31
 - Chinese aid to Tanzania 116
 - and information technology 62
- Tharakan, P. 41
- trade
 - and containerization 12
 - international, and information technology 55-6
 - and the Internet 15-19
 - ratio to GDP, developing countries 54-5
- trade-induced mechanisms, pro-poor technical integration 77-8
- trading partners, PEOPLink 83
- trait-making, labour intensive technology 126-39
- transaction costs 11-13
 - and information technology 12-20
- Ubungo Farm Implements (UFI) 116-17
- United States
 - clothing industry 27-30
 - product innovation 24-5
- urban telephone lines, developing countries 97
- Veen, J. de 117-18, 128, 132, 134, 135
- Vernon, R. 23, 24, 25, 33-4
- vertical intra-industry trade 41-51
- vertically integrated production strategies 84-5
- Village Information Project, Pondicherry 101
- village pay phones (VPP) 92-4, 100
- Vitta, P. 121
- Vonortas, N. 37, 64
- VPP (village pay phones) 92-4, 100
- Wakelin, K. 63
- Walle, N. van de 113, 114, 115, 120
- Wangwe, S. 60, 114, 116
- wireless local loop (WLL) 99-100
- women, and village phones 93
- Wooldridge, A. 15
- World Bank 5-6, 54, 73, 127
- World Investment Report* 84
- Young, J. 104