

Index

- advisor mandate pooling, 220
- Afghanistan, Sheberghan City Bus Terminal, 218
- Africa, Emerging Africa Infrastructure Fund (EAIF), 121, 123
- airports
 - prequalification, concession, 86
 - projects, 194–95
 - revenues, 194
- Akaretler Row Houses, Turkey, 224–25
- approval process, 46
- Australia
 - Lane Cove Tunnel (LCT), 187
 - PPP Guidelines for renegotiation, 176–77
- Bahrain, Al Dur IWPP, 110
- Bangladesh, Investment Promotion and Financing Facility (IPFF), 122
- Belgium, A11 Belgian Motor Link, 170
- best and final offer (BAFO), 87
- bilateral agencies (BLAs), 25
- Brazil, Brazilian Economic Development Bank (BNDES), 124
- bridges bundling, pooling, 220–21
- Build Operate Transfer (BOT), 9, 140–41
 - Philippines, 32
- Build-Own-Operate (BOO), 9
- Build-Own-Operate-Transfer (BOOT), 9
- bundling services, 222
- Canada
 - health PPPs, 213
 - PPP Canada, 33
- capacity issues, commercial skills, 36–37
- Chile
 - infrastructure bonds, 117
 - renegotiations, 175
- Columbia
 - Programa de Ampliación de Cobertura en Educación Secundaria (PACES), 209
 - unsolicited bids, 85
- commercial revenues, additional benefits, 223–27
- communication strategy, 38–39
- concession, implementation
 - agreement, 141–43
- conflict management, dispute resolution. *See* implementation, conflict management and dispute resolution
- contingent support. *See* public support, contingent support
- contract splitting, 148–49
- contractual structure
 - build–operate–transfer (BOT) projects, 140–41
 - concession, implementation agreement, 141–43
 - construction contract, 147–50
 - contract splitting, 148–49
 - dispute resolution, renegotiation, 159
 - force majeure, 160
 - governing law, 160
 - guarantees, credit enhancement, 157–58
 - hedging arrangement, 154–55
 - input supply agreement, 146–47
 - insurance arrangements, 156–57
 - intercreditor arrangements, 155
 - key messages for policy makers, 140
 - lending agreements, 152–54
 - offtake purchase agreement, 144–46
 - operation and maintenance (O&M) agreement, 150–52
 - shareholding agreements, 159
 - sponsor support, 158–59

- corporate financing, 19
- corporatization, 7–8
- credit enhancement, bonds, subordinated debt, 115
- crises. *See* public support, crises
- Croydon Council Urban Regeneration Vehicle (CCURV), UK, 227
- Dakar-Diamniadio Toll Road, Senegal, 192
- debt capital markets, 111–12
- debt competition, 166
- definitions, 3–4
- Dehradun Bus Terminal and Commercial Complex, India, 219–20
- demonstration projects, 42–43
- Design-Build-Finance-Operate (DBFO), 9
- Design-Construct-Manage-Finance (DCMF), 9
- developmental financial institutions, 110
- dispute resolution, renegotiation, 159
- domestic capital markets, 113–14
- education
 - Columbia, Programa de Ampliación de Cobertura en Educación Secundaria (PACES), 209
 - continuing medical education, Eritrea, 210
 - educational philanthropy, 209
 - Eritrea, residency programs and continuing medical education, 210
 - infrastructure delivery, 207–08
 - James F. Oyster Bilingual Elementary School, 224
 - management services, 208
 - philanthropy, 209
 - schooling bundling, pooling, 221
 - service delivery, vouchers, 208–10
 - UK, Partnerships for Church of England Schools (PfCS), 221
- Emerging Africa Infrastructure Fund (EAIF), 121, 123
- Equator Principles, International Finance Corporation (IF), 135
- equity investment, shareholder, 114
- equity selldowns, 171
- Eritrea, residency programs and continuing medical education, 210
- EU
 - competitive dialogue procedure, 88
 - renegotiations, 174
- export credit agencies (ECAs), 25–26
- fiber optic PPP, 197
- financial close, 165–66
- financing, 19–20
 - bankability, 95–96
 - contingent products, targeted support, 102–04
 - debt contributions, 92–93
 - economics, politics, 96–97
 - equity contributions, 91–92
 - financial intermediation, 104–06
 - financial model, 97–98
 - financial terms, ratios, 98
 - financing sources, 90–93
 - fundamentals, 89–91
 - funded products, targeted support, 102
 - government support mechanisms, financial climate, 99–101
 - India, Infrastructure Development Finance Company (IDFC), 105, 121
 - key characteristics, 95f5.2
 - key messages for policy makers, 89, 94, 101
 - legal, regulatory, 97
 - mezzanine, subordinated contributions, 93
 - off-balance sheet, limited recourse financing, 91–92
 - project development funds (PDFs), 106–07
 - refinancing, 98–99
 - South Africa, Project Development Facility (PDF), 107
 - technical merits, use of technology, 98
- fiscal support, 37–38
- Fondo Nacional de Infraestructura (Fonadin), 121–23
- force majeure, 160
- frameworks. *See* PPP frameworks
- franchizing, cooperatives, twinning, 9
- fuel
 - input supplier, fuel supply agreements (FSAs), 26
 - supply, 200
- Gandhinagar rooftop solar project, India, 223
- global capital markets, 112–13
- global commercial banks, 109–10
- good practice contracts, bid documents preparation, risk allocation, 43–44
- governing law, 160
- government support
 - equity holdings in PPP, arguments, 115
 - financing, 19
 - interventions, 115–16

- GuarantCo, 65
 guarantees, credit enhancement, 157–58
- hard mini-perm financing, 110
- health, 207, 211–12
 Canada, health PPPs, 213
 health facility based PPPs, 213–14
 health sector, 211–12
 India, Andhra Pradesh dialysis centers, 215–16
 Italy, healthcare PPPs, 212
 Philippines, National Kidney and Transplant Institute (NKTi), 214
 PPP health programmes, 215
 Turkey, health PPPs, 214
- hedging arrangement, 154–55
- implementation. *See also* project preparation, transactions implementation, procurement
 Belgium, A11 Belgian Motor Link, 170
 construction, commissioning, performance monitoring, 166
 debt competition, 166
 equity sell-downs, 171
 expiry, termination, handover, 186
 financial close, 165–66
 government management functions, 161
 key messages for policy makers, 161
 management team, 164
 operation manual, 162–64
 refinancing, 169–71
 regulatory, 167–68
 Spain, A66 Benavente-Zamora road scheme, 170–71
 step-in rights, contract termination, 177–78
 tariff changes, 168–69
 UK, 2012 PF2 reform process, 164
- implementation, conflict management and dispute resolution, 179–80
 arbitration, 183–86
 Australia, Lane Cove Tunnel (LCT), 187
 early evaluation, 180–81
 immunity, 184–85
 litigation, 182–83
 mediation, 181–82
- implementation, renegotiation, 171–73
 Australia, PPP Guidelines for renegotiation, 176–77
 Chile, renegotiations, 175
 EU, renegotiations, 174
 framework for, 174–75
- India, renegotiations, 173–74
 key lessons for policy makers, 177
 practical guidance, 176
 South Africa, renegotiations, 174–75
 UK, renegotiations, 175
- Independent Power Producer (IPP), 9
- India
 Andhra Pradesh dialysis centers, 215–16
 Dehradun Bus Terminal and Commercial Complex, 219–20
 Gandhinagar rooftop solar project, 223
 India Infrastructure Finance Company Limited (IIFCL), 121, 123
 Infrastructure Development Finance Company (IDFC), 121, 123
 Infrastructure Project Development Fund (IDFC), 57, 121
 Jal Mahal Place, 226
 Public Private Partnership Approval Committee (PPPAC), 33, 41
 renegotiations, 173–74
 Tamil Nadu Urban Development Fund (TNUDF), 119, 124
- India, Jal Mahal Place, 226
- Indonesia
 Indonesian Infrastructure Finance Facility (IIFF), 123
 Indonesian Infrastructure Guarantee Fund Facility (IIGF), 123
- infrastructure projects
 impact, 1–2
 social rates of return, 2
 traditional financing of, 2
- input supplier, fuel supply agreements (FSAs), 26
- input supply agreement, 146–47
- institutional, retail investors, 110
- insurance arrangements, 156–57
- intercreditor arrangements, 155
- Investment Promotion and Financing Facility (IPFF), Bangladesh, 122
- Italy, healthcare PPPs, 212
- Jal Mahal Place, India, 226
- James F. Oyster Bilingual Elementary School, 224
- Jozini Tiger Lodge, South Africa, 229
- Kenya, 32–33
- key actors, parties to PPP projects
 bilateral agencies (BLAs), 25
 construction contractor, 27

- key actors, parties to PPP projects (*cont.*)
 - contracting authority, 22–23
 - export credit agencies (ECAs), 25–26
 - input supplier, fuel supply agreements (FSAs), 26
 - lenders, 24–26
 - multilateral agencies (MLAs), 25
 - non-governmental organizations (NGOs), handwashing, 23–24
 - offtake purchaser, power purchase agreement (PPA), 26
 - operator, operation and maintenance agreement (O&M), 27
 - project company, special purpose vehicle (SPV), 23–24
- key messages for policy makers, 188
- key messages for policy makers (aggregate)
 - bidding, 233–34
 - economic crisis response, 235
 - implementation, regulation, monitoring, 234–35
 - investment climate, 231
 - preparation, 232–33
 - selection, 231–32
- Kruger National Park, South Africa, 228
- lease contract, affermage,
 - concession, 9–10
- legal constraints. *See* PPP frameworks, legal constraints
- Lekki Expressway, Nigeria, 191–92
- lending agreements, 152–54
- Lesotho Health Network PPP, 66–67
- level playing field, 224–25
- local commercial banks, 109
- local currency finance, 108–09
 - Bahrain, Al Dur IWPP, 110
 - Chile, infrastructure bonds, 117
 - credit enhancement, bonds, subordinated debt, 115
 - debt capital markets, 111–12
 - developmental financial institutions, 110
 - domestic capital markets, 113–14
 - equity investment, shareholder, 114
 - global capital markets, 112–13
 - global commercial banks, 109–10
 - government equity holdings in PPP, arguments, 115
 - government interventions, 115–16
 - hard mini-perm financing, 110
 - institutional, retail investors, 110
 - local commercial banks, 109
 - local currency finance, intermediaries
 - Africa, Emerging Africa Infrastructure Fund (EAIF), 121, 123
 - Bangladesh, Investment Promotion and Financing Facility (IPFF), 122
 - Brazil, Brazilian Economic Development Bank (BNDES), 124
 - challenges, 120–22
 - Development Bank of Southern Africa (DBSA), 120, 124
 - function, 119–20
 - India, India Infrastructure Finance Company Limited (IIFCL), 121, 123
 - India, Infrastructure Development Finance Company (IDFC), 121, 123
 - India, Tamil Nadu Urban Development Fund (TNUDF), 119, 124
 - Indonesia, Indonesian Infrastructure Finance Facility (IIFF), 123
 - Indonesia, Indonesian Infrastructure Guarantee Fund Facility (IIGF), 123
 - Mexico, Fondo Nacional de Infraestructura (Fonadin), 121–23
 - The Netherlands, Pebble Commute Scheme credit enhanced bond style, 118
 - pension funds, index linked debt, Regulated Asset Base (RAB) model, 113–14
 - pension funds, prudent person rule (PPR), 112
 - role, 118–19
 - securitization, infrastructure revenues, 114
 - soft mini-perm financing, 111
 - sources, 109–11
 - use of, 117–18
- London Underground, private sector
 - risk, 44, 64
- management team, 164
- Mexico, Fondo Nacional de Infraestructura (Fonadin), 121–23
- multilateral agencies (MLAs), 25
- Nigeria, Lekki Expressway, 191–92
- non-governmental organizations (NGOs), handwashing, 23–24
- offtake purchaser, power purchase agreement (PPA), 26, 144–46
- operation and maintenance (O&M)
 - agreement, 27, 150–52
- operation manual, 162–64
- optimism bias, incentives, 189–90

- Partnership UK (PUK), 41–42
 Partnerships for Church of England Schools (PfCS), UK, 221
 Pebble Commute Scheme credit enhanced bond style, The Netherlands, 118
 pension funds
 index linked debt, Regulated Asset Base (RAB) model, 113–14
 prudent person rule (PPR), 112
 Philippines, Build Operate Transfer (BOT) Law, 32
 Philippines, National Kidney and Transplant Institute (NKTi), 214
 policy makers. *See* key messages for policy makers (aggregate)
 power generation, 198. *See* sector issues, power generation
 associated infrastructure, 199
 credit risk of purchaser, 199
 fuel supply, 200
 merchant plants, 199
 other offtake, 200
 tolling arrangements, 199
 PPP Canada, 33
 PPP frameworks
 approval process, 46
 capacity issues, commercial skills, 36–37
 communication strategy, 38–39
 demonstration projects, 42–43
 fiscal support, 37–38
 good practice contracts, bid documents
 preparation, risk allocation, 43–44
 India, Public Private Partnership Approval Committee (PPPAC), 33, 41
 Kenya, 32–33
 key messages for policy makers, 28–29
 Philippines, Build Operate Transfer (BOT) Law, 32
 PPP, concession, BOT laws, 31
 PPP Canada, 33
 PPP program coordination, 32–33
 project preparation, 40–41
 project selection, 39–40
 project team, 37
 public sector comparator (PSC), 45
 public vs. private capital cost, 38
 risk assessment, 46–47
 South Africa, Strategic Framework for PPPs, 35–36
 South Korea, Promotion of Private Capital into Social Overhead Capital Investment Act (PPP Act), 34–35
 specialized PPP agency, PPP units, 34
 UK, Partnership UK (PUK), 41–42
 UK London Underground, private sector risk, 44
 value for money (VfM), quantitative vs. qualitative VfM, 44–45
 PPP frameworks, legal constraints
 currency, 52
 dispute resolution, 50
 employment, 50–51
 government limited liability project company, 48
 government obligations and support, 47–48
 land rights, acquisition, 48
 penalties, sanctions, bonuses, 49
 procurement, 48
 regulatory frameworks, 51–52
 security rights over assets, 49
 sovereign immunity, 50
 tariffs setting, collection, 49
 tax, 51
 trusts, agency, other legal relationships, 52
 UK reforms, transparency, 52
 vires, 47
 PPP frameworks, legal framework setting and implementation, 29
 guidelines, 32
 key messages to policy makers, 30–31
 laws, regulations, 31
 policy, 30
 PPP health programmes, 215
 PPP program coordination, 32–33
 private initiative (PFI) credits, UK, 54–55
 Programa de Ampliación de Cobertura en Educación Secundaria (PACES), Columbia, 209
 project company, special purpose vehicle (SPV), 23–24
 Project Development Fund (PDF), South Africa, 57
 project development funds (PDFs), 57
 project preparation, transactions
 implementation, procurement, 76
 benchmarking, 84–85
 best and final offer (BAFO), 87
 bid evaluation criteria, 86
 bids, 86–88
 Columbia, unsolicited bids, 85
 competitive dialogue procedure, EU, 88
 demand drivers, 77–78
 direct negotiations, unsolicited proposals, 82–83

- project preparation, transactions
 - implementation, procurement (*cont.*)
 - economic valuation, 78
 - financial analysis, 78
 - inception, pre-feasibility, preliminary viability study, 76–77
 - key messages for policy makers, 77, 81, 82–83
 - legal assessment, 79
 - optimism bias, incentives, planning, 80–81
 - preferred bidder, 87
 - prequalification, 85–86
 - prequalification, airport concession, 86
 - risk matrix, 79–81
 - single bids, 87
 - technical analysis, 78–79
 - viability, feasibility study, full business case, 77–82
- public asset protection, 227
- Public Private Partnership Approval Committee (PPPAC), India, 33
- public private partnerships (PPP)
 - accounting treatment implications, 21–22
 - benefits, 2
 - categorizing, 10–12
 - classification model, 10–11
 - conducive framework context, 15–16
 - definitions, 3–4
 - efficiency, 13
 - financing sources, 12–15, 19–22
 - fundamentals, structures, 7–10
 - government challenges, effective PPP framework, 5
 - interest rates and, 20–21
 - investment climate, 16–17
 - key messages for policy makers, 5–6, 8–9, 18–19
 - programmes, institutions, 15–18
 - public sector motivations, 12–15
 - sample projects, 4–5
 - technology, innovation, know-how, 14
 - traditional public procurement vs., 2
 - transparency, anti-corruption, 14
 - whole asset life solution, 13
- public sector comparator (PSC), 45
- public support, 53
 - fundamentals, 53–55
 - India Infrastructure Project Development Fund (IDFC), 57, 121
 - key messages for policy makers, 55
 - mechanisms, 54f3.1
 - project development funds (PDFs), 57
 - purposes, 55–57
 - South Africa, project development fund (PDF), 57
 - targeted support, 56
 - UK private initiative (PFI) credits, 54–55
- public support, contingent support, 62
 - bilateral/multilateral guarantees, development finance institutions (DFIs), 64–65
 - contingent contributions, government grants, 64
 - contingent debt, equity, 63–64
 - government guarantees, 63–64
 - government payment obligations, secure debt, 63
 - GuarantCo, 65
 - key messages for policy makers, 62–63
 - London Underground, private liability, 64
- public support, crises
 - alternative sources, debt/equity, 73–74
 - coping with, 67–68
 - cost of capital, debt and equity availability, 69–70
 - demand profile, 69
 - dispute resolution, 75
 - donor funds availability, 71
 - government funds availability, 70–71
 - hedging, other financial mechanisms availability, 70
 - increased contingent support, 74
 - key messages for policy makers, 68
 - locally sourced debt/equity, 73
 - private debt equity, replaced with public resources, 70–71
 - project development funding, 74–75
 - revenue support, cost reductions, 70–71
 - solutions, 71–75
 - tenor extension, 74
- public support, funded instruments
 - availability payment mechanism, roads, 60
 - equity, 61
 - grants, capital institutions, 57–59
 - loans, 61
 - payments for services rendered, 59–60
 - Russia, Investment Fund, 58–59
 - viability gap funding (VGF), 58–59
- public support, government liabilities management
 - Lesotho Health Network PPP, 66–67
 - liabilities assessment, 65–66
 - liabilities monitoring, accounting, 67
 - liabilities payment risk, 67
- public vs. private capital cost, 38

- quantitative vs. qualitative value for money (VfM), 44–45
- refinancing, 169–71
- regulatory, 167–68
- renegotiation. *See* implementation, renegotiation
- risk allocation
- completion risk, 128–30
 - currency risk, 133
 - efficient risk allocation, 125–27
 - environmental, social risk, 134–35
 - Equator Principles, International Finance Corporation (IF), 135
 - financing risk, 131–32
 - key messages for policy makers, 125
 - legal, regulatory risk, 128
 - offtake risk, 133–34
 - operations risk, 130–31
 - performance risk, 130
 - political risk, 125–27
 - risk, efficient risk allocation, risk noise, 136–39
 - risk management, mitigation, 135–36
- road bundling, pooling, 220–21
- Russia, Investment Fund, 58–59
- Senegal, Dakar-Diamniadio Toll Road, 192
- service, management, operation and maintenance (Q&M) contracts, 8
- shareholding agreements, 159
- small scale PPPs, 216–17. *See* sector issues, small scale PPPs
- advisor mandate pooling, 220
 - Afghanistan, Sheberghan City Bus Terminal, 218
 - approval process, 217
 - centralized support, 219
 - credit position, 218
 - finance sources, 222–23
 - India, Dehradun Bus Terminal and Commercial Complex, 219–20
 - India, Gandhinagar rooftop solar project, 223
 - lack of capacity, 217
 - processes, 218–19
 - size, 216–17, 218
 - standard documents, processes, 220
- South Africa
- Jozini Tiger Lodge, 229
 - Kruger National Park, 228
 - Project Development Facility (PDF), 107
 - Project Development Fund (PDF), 57
 - renegotiations, 174–75
 - Strategic Framework for PPPs, 35–36
- South Africa, Jozini Tiger Lodge, 229
- South Africa, Kruger National Park, 228
- South Korea, Promotion of Private Capital into Social Overhead Capital Investment Act (PPP Act), 34–35
- Spain, A66 Benavente-Zamora road scheme, 170–71
- specialized PPP agency, PPP units, 34
- standard documents, processes, 220
- step-in rights, contract termination, 177–78
- Strategic Framework for PPPs, South Africa, 35–36
- Tamil Nadu Urban Development Fund (TNUDF), India, 119, 124
- Tax Increment Finance (TIF) captures, 224–26
- telecommunications, 194–95
- fiber optic PPP, 197
 - network operation, 196–97
- Singapore, Next Generation Nationwide Broadband Network (NBN), 197
- technology upgrades, 196
- vendor finance, 196
- The Netherlands, Pebble Commute Scheme credit enhanced bond style, 118
- tourism, 227
- transportation, 188–90
- airport projects, 194–95
 - airport revenues, 194
 - capital subsidies, 189
 - land acquisition, 188–89
 - Nigeria, Lekki Expressway, 191–92
 - railways, 192–94
 - regulation risk, 189
 - roads, tunnels, bridges, 190–91
 - Senegal, Dakar-Diamniadio Toll Road, 192
 - toll road traffic forecasts, 191
- Turkey
- Akaretler Row Houses, 224–25
 - health PPPs, 214
- Turkey, Akaretler Row Houses, 224–25
- 2012 PF2 reform process, UK, 164
- UK
- Croydon Council Urban Regeneration Vehicle (CCURV), 227
 - London Underground, private sector risk, 44, 64
 - Partnership UK (PUK), 41–42

UK (<i>cont.</i>)	water and sanitation services (retail), 201–03. <i>See</i> sector issues, water and sanitation services (retail)
Partnerships for Church of England Schools (PfCS), 221	billing, collection, 205
private initiative (PFI) credits, 54–55	leakage, 203
reforms, transparency, 52	low-income consumers, 203–05
renegotiations, 175	metering, measuring, 205
2012 PF2 reform process, 164	private sector investors
UK, Croydon Council Urban Regeneration Vehicle (CCURV), 227	and, 201–03
	regulation, 206
	revenues, 203
value for money (VfM), quantitative <i>vs.</i> qualitative VfM, 44–45	scope of works, 205–06
viability gap funding (VGF), 58–59	tariff levels, 206