

## Index

- 2030 Agenda, 6, 22
- accelerator, 289, 292, 311, 355
- actor-oriented model, 13
- agent computing, 13, 27
- agent-based modelling, 13
- aid data, 240
- aid effectiveness, 231
- aid-to-government-  
 expenditure ratio,  
 240
- Akamatsu, Kaname, 151
- allocation profile, 26, 111
- Arthur, Brian, 8
- Axelrod, Robert, 14, 150
- Axtell, Robert, 13, 14
- behavioural rules, 30
- benchmark analysis, 85
- big push theory, 291
- bottleneck, 25, 189, 289, 311,  
 352
- idiosyncratic bottleneck,  
 189
- systemic bottleneck, 313
- bottom-up multi-agent  
 models, 13
- Boudon, Raymond, 30
- budgetary frontier, 190
- bureaucrat, 110
- calibration, 130
- Carley, Kathleen, 144
- causal inference, 34
- central authority, 117
- Coleman's boat, 31
- Coleman, James, 30
- collateral indicator, 56, 106
- collective action, 210
- complexity science, 24
- computable general  
 equilibrium, 89
- computational social science,  
 367
- confidence interval, 140
- contribution (agent choice),  
 111
- contribution (federal transfer),  
 268
- corruption, 25, 207
- counterfactual, 34, 153, 310
- data-generating process, 27
- dependency account of  
 causation, 27, 35, 38
- deprivation, 324, 356

- development gap, 169, 171, 351  
 devolved government, 265  
 difference-in-differences, 39  
 differential evolution, 279  
 disbursement schedule, 117  
 downward causation, 33
- Elster, Jon, 30  
 ENIGH, 335  
 Epstein, Joshua, 14
- feasibility, 167  
 Fiscal Coordination Act, 268  
 fiscal federalism, 267  
 fiscal imbalance, 268  
 flying geese, 151  
 fungibility, 232
- gap closure, 170, 176  
 gapping, 119  
 Gaussian process, 250  
 general equilibrium model, 88  
 generative account of  
   causation, 27, 35, 42  
 generative causation, 30  
 goal, 22  
 goodness of fit, 137  
 government expenditure, 23,  
   72–74, 97, 216, 233, 336,  
   346  
 government official, 110  
 gradient descend, 132  
 growth diagnostics, 291
- Heckman, James, 34  
 Hedström, Peter, 30  
 horizontal mechanism, 35  
 Human Development Index,  
   277  
 hypothesis testing, 142, 248
- impact evaluation, 34  
 impact metric, 51, 244  
 individual-based model, 13  
 inefficiency, 111  
 instrumental indicator, 56,  
   106  
 international aid, 231, 354
- lateral causation, 33  
 learning, 114, 116
- Merton, Robert, 30  
 microdata, 28  
 Millennium Development  
   Project, 119  
 Monsiváis, Carlos, 3  
 Monte Carlo simulation, 44,  
   108, 131, 135, 153  
 multi-agent system, 13  
 multidimensional poverty,  
   324
- natural experiment, 38, 49  
 neoclassical, 13, 26  
 network analysis, 92, 101, 160  
 network topology, 23  
 null model, 142

## 392 INDEX

- Open Government, 5, 70  
*Oportunidades*, 271  
 overfitting, 158
- parameter recovery, 154  
 participation (federal transfer), 268  
 Pearl, Judea, 34  
 policy guidelines, 357  
 policy landscape, 223  
 policy prioritisation, 23  
 Policy Priority Inference, 10, 26  
 principal-agent, 25, 111, 209  
*Procampo*, 271  
 production account of  
   causation, 27, 35  
 public functionary, 110  
 public governance, 207, 353  
 public servant, 110
- randomised controlled trial, 84  
 rational-equilibrium model, 13  
 regression analysis, 86, 233  
 remittances, 325, 335, 356  
 rule of law, 25, 75, 207
- Schelling, Thomas, 150  
 Simon, Herbert, 366  
 social mechanisms, 30  
 social norm, 113, 116, 210
- socioeconomic rights, 324  
 spillovers, 24, 87, 104, 108, 145, 160  
 spline, 226  
 strategic planning, 359  
 structural causal models, 28  
 structural factor, 108  
 subnational central governments, 267  
 subnational development, 265, 357  
 surrogate model, 129  
 Sustainable Development Goals, 6, 56  
 Sustainable Development Report, 55  
 Swedberg, Richard, 30  
 synergy, 23, 167  
 system dynamics, 91  
 systemic bottleneck, 289  
 systems thinking, 24, 210
- trade-off, 23, 167
- United Nations, 6  
 United Nations Development Programme, 10
- validation, 144, 256  
   external validation, 144  
   internal validation, 147  
   soft validation, 150  
   stakeholder validation, 151