

Index

- academic research and researchers 30
adjustment cost 59, 73
agents 28, 66, 69, 70, 74, 87, 170, 175, 178
aggregate investment 87
Aghion, P.
 creative destruction xv, xvii, 271
 enforceability of contracts 279, 281–2
 patent protection 111–12
 R&D 265
 Schumpeterian growth model 5, 28, 268
‘AH model’ 6, 22
Alesina, A. xiv, 189, 192, 265–6, 274
Antitrust regulations 271–2, 278
Aoki, M. 53–4, 59
Arrow, K.J. 29, 117, 145–7
asset and liability stocks 249
asymmetric consumers 69, 74
asymmetric income distribution 185
atomistic producers 8
- Balducci, R. xxii, xxiv
Barro, R. xxiv, 53, 60, 173, 207–9, 218–19, 269
basic needs 91
battle of mark-ups xiv
behavioural economics 188, 192
behavioural equations 239
Bellman equations 193
Bénabou, R. 163, 189, 267, 274, 279, 281
Benassy, J.P. 53–4
Bertola, G. xiv, xix, 266, 274
Bertrand competition 115, 269
Bils, M. 82–3, 104
BLS 83, 105
Bolton, P. 268, 279, 281–2
bonds 270
Bonifati, G. 101, 107
Borzekowski, R. 145–7
Boskin Commission 82, 105
bounded rationality approach 69, 70
breadth xxii, 112, 116–17, 125–6, 260
Bresnahan, T.F. 51, 82
Bucci, Alberto xx, 6–9, 22–3
Business Week 97
- Calvo–Armengol, A. 145, 147, 153, 159, 163
‘Cambridge equation’ 223
capital 56, 62, 66
capital accumulation 171, 181, 182–3
capital market 118
capitalist economy xxv
CES consumption index 268
CES technology 21–2, 23, 290–91, 299
classical economists xi, 227, 236
classical tradition xvi
Cobb–Douglas production function xvi, 4, 22, 134, 209, 291
Cobb–Douglas versus CES 4
collaborative behaviour 42
collective goods 90–91
comparative statics and balanced growth 40–43
competitive research firms 11
complementarities and interdependencies 90
composition effect 86, 90, 91, 104
concessional rescheduling of debt 260
consumers
 choice 84
 educated by produces 84
 electronics 98
 maximization 12, 24
 preference 69, 84
consumption 34, 51–2, 72, 76
 analysis of patterns 84, 91–4
 composition xxi, 76–7, 90, 104, 106
 differentiation in 68
 distribution across goods 68

- 'glamorous' 91, 95–7, 102, 104
- innovation 85–6, 89, 97–9, 101, 105
- Keynesian effective demand 77
- leisure and 67
- public 209–15, 221
- uneven productivity growth 78
- variety and growth 51–5, 71–2
- cooperative and collaborative departments 41
- corporate channel 265, 267, 274
- Corporate Profits 102
- countries 239
- Cozzi, G. xxv, 273
- crime
 - economy 182
 - equilibrium 180
 - incentives xxiii, 168, 171
 - inequality and economic growth 169, 184
- criminal activity 169, 184

- Dasgupta, P. 29–30, 33
- Daveri, F. xviii, 132
- David, P.A. 29–30, 33, 99–100
- De Groot, H.L.F. xviii, 133
- debt
 - analysis 238
 - crisis 239
 - foreign 238
 - fragility 257
 - government 223, 225–7, 236
 - high debt/low income countries 245–6, 248, 253
 - increasing 261
 - model for foreign 240–49
 - overhang 239
 - partial forgiveness or relief 239, 255, 260
 - policy tools xxv
 - sovereign 238, 249, 261
 - sustainability of 238, 240, 259–60
- deficit 224
- demand factors 79, 100, 107
- 'destruction' of jobs xvi
- devaluations 252
- developing countries 238, 298
- Dewatripont, M. 5, 270
- Di Pasquale, D. 189, 192
- differentiated goods 54, 72
- differentiated product 90

- 'diffusion lag' 99
- disclosure 29, 33, 111–12, 116, 124–5
- disposable household income 210
- distorsive taxation 207, 220
- distribution of wealth and income xv, 13, 285
- Dixit–Stiglitz
 - consumption index specification 114
 - production function 53
 - utility function 53, 57–8
- 'dramatic product innovations' 82
- Duranton, G. xviii, 132
- Dutt, A.K. xxiv, 224–7, 234–5
- dynamic analysis 122–3, 291, 300
- dynamic goods 82

- EBrain Market Research Report 98
- economic actors 238–9
- economic environment 52
- economic growth
 - criminal activity and 168
 - multiple equilibria 285
 - poverty traps 285–6
 - rate of 219
 - theory xiii
- economic miracle 27
- economic stagnation 168
- economic systems
 - cumulative dynamics xvii
 - multiple equilibria 180
- economists, self-confidence 191
- economy
 - crime 171
 - definition of profit-led 251
 - enforceability of contracts 281
 - firms 173–4
 - government 174–5
 - growth trap 184
 - households 171–2
 - mature 298
 - populated by two-period living individuals 286
 - scientific research 31–2
- education 4, 15
 - government 141, 170, 173, 175, 183
 - human capital 207
 - investment xx
 - part of collective goods 91
 - trade unions and 133

- effective demand
 - consumption composition 102
 - debt servicing 239
 - expansion and contraction 99
 - function 250–51
 - new generation growth models 104
- effectiveness of redistributive policy 190
- effects of public policies 229–34, 296–9
- efficient bargaining 131–2, 140
- effort 34
- employment
 - information on skills 147
 - job arrival rates 145–6, 188
 - search for better jobs 189
 - self-confidence 195
- endogenous growth models
 - constant growth rate xv, 207
 - income distribution xiv–xv
 - innovation 28
 - investment in education xx
 - investment in human capital 140
 - investment in physical capital 132
 - optimal factor shares 16–17, 134–7
 - unequal distribution of wealth xvii
- Engel law and Engel curves 81, 83, 106
- envelope theorem and Leibniz rule 194
- equilibrium 35–6, 289
 - capitalism 270–76
 - crime 178–81
 - dynamics 36–40
 - effort of researchers 41
 - growth path 70
 - innovation flow 70
 - intertemporal 59–60, 60–66, 249, 262
 - rational-expectations 119
 - steady-state 14, 42–3, 66–7, 211, 121–2
 - symmetric 270
- equities 270
- 'escape competition effect' 6
- evolutionary game theory 201
- exogenous bargaining power of unions 131
- exogenous innovations 54
- exogenous preferences 52
- expectations* 259
- expenditure 79
- expenditure and labour cost reduction 259, 262
- externalities 28, 38, 41, 42, 91, 132, 219
- basic research 44
- collaboration and information-sharing 30
- distorsive taxation can internalize effect of 207
- learning-by-doing 285
- network 98
- R&D 276
- extortion 168
- factor shares xxii
- firms
 - balance sheets 243, 245
 - cooperate at R&D 267, 278
 - debt accumulation 249
 - financial business 240
 - marginal productivities 287–8
 - R&D investment 271, 272
 - return in R&D 29–30
- first-generation innovation-based theory 4
- fiscal policy 207–9, 215–19
- 'fixed factors' 55
- foreign debt
 - contracts 238
 - foreign-good indexed 245
 - foreign sector 240
 - investment-constrained system 238–40, 243, 260–61
- free competition 223
- functional relationships 88, 106
- Galor, O. 279, 281–2
- general equilibrium 36, 68, 112–13, 188
- geometry of the network 146, 164
- Gini index 154, 155, 158, 165
- Glaeser, E.L. 168, 189, 192
- Golden Rule of accumulation 290, 300
- Gordon, R. xvi, 51, 82, 94, 106
- government
 - debt 223–5, 227–9
 - deficit 227, 231, 235
 - expenditure 208, 220
 - finances balanced budget 174
 - intervention on household impatience 217, 220
 - intervention on income distribution 235
 - investment in education or security services 175

- issues bonds 225
- levies lump sum taxes e/o subsidies 225, 287, 288
- public consumption 215, 221
- public education and schooling 170, 173, 179, 187
- public policies 41
- taxes households 141
- Grossman, G.M. 3–4, 6–7, 11, 19
 - Dixit–Stiglitz specification 53, 57
 - patent protection 111–13, 115
 - quality-ladder growth model 122, 125
 - R&D development 265
- Grossman and Helpman-type economy* 22
- Grossman–Helpman–Lucas-type economy* 23
- growth enhanced by
 - consumption composition 54, 77
 - effective demand 77–8
 - preference for variety xxi
 - research sector xx
 - structural dynamics and demand composition 78–80, 86
 - unionized labour market 132
- growth rate of
 - consumption 137, 143
 - economy, no criminal activity 182
 - expenditure 91
 - organization of science 43
- Gualerzi, D. xxi, 76, 86, 93–4, 96, 99–102

- Hahn, F. xiii, xv
- Hamilton–Jacobi–Bellman equation 274
- Hamiltonian function 135, 143, 210, 215, 277
- Harrod–Domar model 76–7
- hedonic techniques 82
- Helpman, E. 3–4, 7, 11, 19
 - Dixit–Stiglitz specification 53, 57
 - endogenous growth theory 28
 - patent protection 111–13, 115
 - quality-ladder endogenous growth model 122, 125
 - R&D development 265
- heterodox models, economic system 238
- heterogeneity 69
- horizontal collusion 272
- households 287, 300
 - differences in income 172
 - educational activities 8
 - equities 240
 - labour share 142
 - wage and profit income 244, 247
- Howitt, P.
 - creative destruction xv, xvii, 271
 - labour in scientific section 36–7
 - patent protection 111–12
 - R&D 265
 - Schumpeterian growth model 5, 28
- human capital 4, 6, 7, 141–2

- ICT
 - consumption innovation 104
 - development 99
 - impact greater as we move from home electronics to Internet 97
 - initial stage 100
 - products 94
- illiquidity 259
- imitation 96, 123
 - partial 110–13, 117, 126
- imperfect information 191
- incentives to commit crime 175–8
- income inequality 224–5
- income level and poverty 170
- increase in overall deficit 230
- increasing returns 101, 107
- individuals 85, 266–7, 275, 277, 280
- industrialization 81, 96
- inequality
 - differences in connection 146–7
 - dynamics of 147
 - network structure 146, 164
 - profit-based income 266
- inequality and growth 265–7
- inequality in income distribution 169, 223, 234
- inflation rate and unemployment xvi
- information distribution 69
- information-communication technology 52
- infringement of the lagging breadth 125
- infringement of patent 111
- innovation
 - consumption 51, 83–6
 - continuum memoryless Poisson process 117
 - discovering new designs 7

- enhance notion of eating 91
- fashion, collective aspect 91
- risky venture 117
- transformed ICT products 97
- uncertain 17, 33
- innovative activities of firms 5, 31
- innovative firms 28
- innovative investment 88
- intellectual property (IP) rights
 - protection 111, 125
- interest rate 235
- interest rate stabilization 225, 232, 233, 237
- intergenerational distribution of
 - resources 285
- intergenerational transfers 292, 296, 298
- intermediate firms 10
- intermediate sectors 9
- intersectoral competition for skills 4, 24
- investment
 - bargaining power xix
 - education 183
 - ICT sector 97
 - innovative 90
 - intensity 90
 - new products 86
 - productivity 101
- 'invisible colleges' 30
- IT 101
- Jackson, M. 145, 147, 153, 159, 163
- job
 - arrival rate 201
 - contract networks 145–6
 - search activity 163, 166, 189, 190
 - search model 195–7
- Josten, S.D. 168–9
- 'Kaldor facts' 82
- Kaldor, N. xii, xxiv, 131, 223, 226–7
- Kaldor–Pasinetti tradition 224, 235–6
- Kaleckian model 234
- Keynes–Kaldor–Kalecki and structuralist tradition xxv
- Keynesian economists 225
- Keynesian growth theory 78, 105
- Keynesian literature 223–4
- Klenow, P.J. 82–3, 104
- knowledge xii–xiv, xviii, xxi, xxvi, 3–4, 6–7, 11, 14, 22, 27–35, 43–4, 54, 69–70, 73, 82, 101, 111, 126, 163, 267, 269, 278
- Köszegi, B. 189, 191–2
- Krauth, B.V. 147, 165
- Kurz, H.D. xiii–xiv
- Kuznet facts 82
- labour
 - costs 132
 - market 147, 150, 250, 262
 - power xi
 - productivity 171
 - rigidities 100, 107
 - role of trade unions and xviii
 - search 189
 - segmentation 102, 104
 - social networks 146
 - supply and crime 169, 178
 - transmission of information on jobs in 164
 - unions xvii–xx
- La Ferrara, E. 189, 192
- Laffer curve 239, 279
- Laibson, D. 189, 192
- Lancaster, K. 51, 81
- Langrangean multiplier 287, 300
- learning new preferences 79–80
- learning principle 79
- leisure 66–7
- LIBOR bond rate 245
- Lindbeck, A. 190, 198–200
- Lingens, J. xix, 133
- LitAlert database 110
- Lloyd-Ellis, H. 168–9
- 'long-range' links 159
- long-term growth 51, 68
- Lossani, M. 93–4
- low-labour productivity agents 171
- low-paid jobs 102
- Lucas effect* 5
- Lucas, R.E. 3, 7–8, 16, 18–19, 207
- Lucas–Grossman and Helpman model 21
- lump sum taxes/transfers 286, 298–9
- McDonald, I.M. 131, 137
- 'Malthusian Law of Population' xi
- Mansfield, E. 31, 80
- Marceau, N. 168–9
- Marshall–Lerner condition 252, 262
- Marx, Karl 227, 236

- measurement of quality 82
 Metcalfe, J.S. 71, 84
 methodological individualism-rational agent (MIRA) 238
 mixed equilibrium 180–81
 mobility rates 188
 model setup for economic growth 286–90
 Modigliani–Miller theorem 131, 137
 monetary theory of distribution 223
 Montgomery, J.D. 146, 162
 Mortensen, D. 188, 194
 multiple equilibria 63, 200–201, 285, 293–4
 existence 296–7
 poverty traps 286
 steady-state 64

 Nash bargaining solution 138
 needs structure 91
 Neo-Schumpeterian endogenous growth theory 31, 111, 115
 new products 80
 notion of ‘patent scope’ 112, 126
 product market competition 4
 role of demand 80, 105
 neoclassical
 economists xii
 theory of employment xv
 theory of growth 207, 220
 network
 composition 163
 effects 162
 geometry 147, 158
 new competitor 116
 new consumption good 51, 52, 72
 new growth theory 207, 220
 new products and expansion
 basic relationships 86–9
 composition effect 89–90
 no-arbitrage condition 118, 122
 no crime equilibrium 180
 no-fixed factors 54–5
 no-growth trap 37, 40
 nominal wages 242
 non-decreasing returns to scale 207, 220
 norm of ‘priority’ 33
 number of links 156
 Nyberg, S. 190, 198–200

 O’Donoghue, T. 111, 125
 Office and Computing Machines (SIC 357) 100
 OLG model *à la* Samuelson–Diamond xxv, 299
 optimism in search model 189
 output–capital ratio 240
 output and distribution variations 249
 output and inequality 160
 overlapping generation model 133, 170–71, 223, 230, 286

paradox of cost 257
 Parreno, J.M.R. xix, 133
 ‘Pasinetti’ and ‘anti-Pasinetti’ theorems 223, 225, 228, 235
 Pasinetti, L.L. 76, 78–9, 81, 86, 88, 105, 131, 223, 226
 patent 124
 acquisition 61
 block for new product or process 111
 infringement 111
 law 112, 115
 litigation 110
 protection for R&D 111
 virtual everlasting monopoly for firms 111
 PAYG social security scheme xxv, 298
 Perotti, R. 265, 279, 281
 personal distribution of income 226
 Persson, T. xiv, 265–6, 274
 Piketty, T. 279, 281–2
 ‘pivotal shareholder’ 267, 274
 pivotal voter 274
 Poisson stochastic process 33
 Ponzi debt rollover 255
 population
 growth and poverty trap 286
 stationary 12
 productivity growth 4
 post Keynesian theory of growth and distribution 223, 228, 234–5, 236
 poverty trap 290
 basic ingredient of 291
 conditions for existence of 293–4, 300
 definition 285, 291, 300
 effects of public policies 296
 with intergenerational transfers 292–6
 without intergenerational transfers 290–92

- OLG economy 290
- PAYG social security scheme and xxv
- taxing the youngs 295, 299
- predator 176–7
- preference for variety 57–8, 61, 67, 68
- preferences for new goods 69
- price increases 82
- private and collective goods 90, 106
- producers 81
- product of final good 42
- product innovation 80, 83, 95, 96, 104
 - cycle 89
 - polarized pattern of consumption* 96
 - quality and variety 82–3
 - role in New Growth Theory models 80
 - theoretical perspectives on new products 80–82, 95
 - way to promote demand 79
- product market competition 4–5, 24
- production
 - intermediate goods 4
 - intermediate inputs 240
 - human capital 4
 - knowledge 27
- production function 208
- productive agents 164
- productive investments xxiv
- productivity
 - dispersion 162
 - gains 102
 - growth 78
- profit
 - explaining investment 131
 - fraction of aggregate expenditure 280
 - result of R&D investment 280
 - share of individual income 279
 - taxation 278–80
- property rights 207
- 'pseudo-dynamics' 78
- public sector 35 *see also* government
- quality improvement 83
- quality-ladder R&D-based growth model xxii, 112–13, 125
- quest for priority 30
- R&D
 - cooperation 272, 282
 - 'in-house' 6
 - lower investment 281
 - monopolist firm 269, 282
 - patent infringement 110
 - R&D-based endogenous growth model 118, 123
 - sector of intermediate good producer 4
 - shareholders' optimal choices 273
 - socialist economy 276
 - who decides the amount carried out in the economy? 265–6
- Rebelo, S. 6–7, 18, 22, 82
- redistributing opportunities 188–91
- redistributive policy 198–201, 286
 - effectiveness 191
 - long-run dynamic outcomes 299
 - multiple equilibria of 190
- rentiers
 - benefits received xxiv
 - government wealth 232
 - profits and interests 225
 - saving 225
- replicator dynamics model 81
- rescheduling 239
- research
 - financing 28
 - incentive 43
 - uncertainty 30
- researchers xxi, 28
- Rey, P. 5, 270
- Ricardian equivalence theorem 298
- Ricardo, David xi
- Robinson, J. 80, 86, 226
- Rodrik, D. xiv, 265–6, 274
- Romer, P.M. 28, 111, 207, 265
- Rowthorn, R.E. xvi, 290
- rule of 'full disclosure' 33
- S&P 500 index 102
- Sacerdote, B. 168, 189, 192
- Sala-I-Martin, X. 53–4, 60, 269
- Salvadori, N. xiii–xiv
- Sánchez-Losado, F. xix, 133
- satiation 81
- saving 115, 265–8, 276–8
- saving capitalism 265–84
- saving propensity 81, 133
- scale-invariant quality-ladder growth model 113
 - dynamic equilibrium system 119–21
 - preferences 113–15

- R&D sector 117–19
- Schumpeter, J. xvii, xviii, 27, 80, 81, 84, 265, 266, 267, 269, 271
- Schumpeterian growth model 5, 23, 32, 80
- science sector 33–4, 44
 - public financed 44
 - public good 33
 - technological innovation 29
- Science and Technology institutions 31
- scientific community 29
- scientific research 30, 44–6
- scientists xx, 28
- search
 - effort and self-confidence 189
 - model 189
 - unemployment 134
- ‘second generation’ of consumer durables 95
- self-confidence 191–2, 201
 - ‘above median effect’ 191
 - behaviourable trait of 201
 - inequality in wages 188
 - investment in image 190
 - search effort for better jobs 189
- self-esteem
 - individual social capital 192, 202
 - motivation in search activities 191
 - search effort 189–90, 201
- self-image, ‘ego-utility’ 191
- shared capitalism 103
- shareholders 271
- Shell, K. 27–8, 44, 265
- short-run and longer-run dynamics 249
 - equilibrium 253–4
 - foreign debt 255
 - profit- and wage-led effective demand 251–2
 - rescheduling at different rates 256–8
 - stability 254–5
 - temporary equilibrium 249–50
- short-run bargaining 137–9
- short-run behaviour 54
- signalling 189
- simulations 154, 164
 - average path length 158–9
 - composition and exclusion 160–62
 - inequality dynamics 157
 - relation between effort and tax rate 41, 41–2
 - social links 154–8
 - social networks 154
- Smith, Adam xi, xii, xiv
- social accounting matrix (SAM) 240, 244
- social capital 192
- social integration 161–2
- social links 145
- social networks xxii, 162–4, 188
- social norms 190, 200–203
- social planner 131, 134, 141–2
- social stigma 198, 200–201, 201
- social ties 146, 163
- Solow, R.M. xii, xiii, 27, 131, 137
- specialization 6, 24
 - degree of returns 8, 24
 - productivity effects 55, 73
- spillovers 94, 280
 - duplications 272
 - knowledge 3, 6–7, 43
 - research 31
 - without knowledge 7, 11, 22
- standard *solvency* condition 255
- stratification 163, 166
- structural change 81, 99–101
- structural dynamics 101–3
- structure of needs 89, 106
- study of variety and quality growth 83–4
- substitutability effect 5, 209, 219, 291
- substitution, rate of item 83, 105
- Tabellini, G. xiv, xviii, 132, 265–6, 274
- taste formation 85–6
- taxation
 - distortionary 268
 - dynamics of economy 295, 299
 - growth 278, 285
 - of labour income 132
 - poverty trap 286
 - of profit 35, 278
 - R&D 279
 - redistributive 265, 281
- taxes and subsidies 199
- Taylor, L. 238, 242
- technical progress
 - different pace 78
 - employment xv, xvi
 - physical and human capital 18

- technological
 - change, skilled-biased xvi, xxvi
 - development, 27
 - systems 80
- technology 18–22
- Technology and Culture* 84
- technology of physical production 55–7
- technology of R&D sector 60
- theft 172
- theory of behavioural determinants of earnings 188
- theory of output 78, 105
- Tirole, J. 189, 191–2
- trade unions 132–3
 - bargaining power 140
 - dual labour market xviii
 - effective behaviour 141
 - firms 137
 - low-skilled workers xviii
 - optimality 139–40
 - ‘rational’ 141
- ‘two-tier marketing’ 97
- unemployment
 - distribution and growth xv, xvi, xvii
 - efficiency wages xix
 - growth xviii
 - job offer 145
 - wage share xv
- unequal distribution xvii
- unequal individual wealth 273
- unskilled workers 134
- US economy
 - 1980s weak growth 93
 - consumer durables 95
 - deregulation of financial services 101
 - expansive cycles (1980s and 1990s) 77, 91–2, 106
 - Federal Circuit Judges and Supreme Court and patent law 112
 - growth rate (1979–89) 92, 106
 - macroeconomic indicators 93, 102–3
 - National Cooperative Research Act (1984) 272
 - new products and industries 103
 - Patent and Trademark Office 110
 - performance of stock market 103
 - pivotal role of ICT 92, 94, 106
 - spending on consumer durables 82, 105
 - structural change 101
 - study of firms 31
 - USD bond rate 245
- Uzawa, H. 8, 16
- variety xiii, xx–xxii, 4, 8–11, 14, 16, 51–74, 76, 79–83, 86, 90–91, 97, 104, 271
- wages
 - boom 102
 - cut 257
 - inequality 145
 - marginal productivity 280
 - part of workers’ income 103
 - real xv
 - stagnation of (1990s) 104
- wait unemployment 132, 133
- Wapler, R. xviii, 134
- weak ties 146, 165
- Weibull, J.W. 190, 198–200
- welfare program 198
- welfare state and social norms 190
- ‘winner take all’ 30
- Witt, U. 69, 81
- workers
 - ability 192, 202
 - bargaining power 260
 - compensation 101–2, 107
 - earnings 132
 - income 224
 - savings 225
 - search for job 193
 - selective information 149, 165
 - self-confident xxiii, 191
 - skilled and unskilled 134, 145, 148
 - wages 147
 - worker–job matches 163
- Yoshikawa, H. 53–4, 59
- You, J.J. xxiv, 224–7, 234, 235
- Zeira, J. 279, 281–2