

## Author index

- Archibald, G.C. 160, 164, 187  
 d'Aspremont, C. 15, 17, 185  
 Auernheimer, L. 90, 91
- Baumol, W.J. 190  
 Bishop, R.L. 188  
 Bonnano, G. 160, 170  
 Butters, G. 1
- Capozza, D.R. 186  
 Chamberlin, E.H. 2, 5, 8, 42, 58, 61, 187  
 Corstjens, M. 191
- Dasgupta, P. 27  
 De Palma, A. 29, 32, 185  
 Dixit, A.K. 45, 54, 58, 62, 63, 75, 94, 137,  
 148, 149, 188, 189, 190, 191  
 Dorfman, R. 73
- Eaton, B.C. 27, 145, 146, 147, 160, 163, 164,  
 171, 185, 186, 187, 191
- Friedman, J.W. 184
- Gabszewicz, J.J. 18, 22, 27, 118, 117, 189,  
 190  
 Gal-Or, E. 185, 190  
 Graitson, D. 186  
 Grossman, G. 1
- Hart, O.D. 1, 2, 42, 45, 54, 64, 137, 138, 140,  
 145, 149, 150, 151, 153, 155, 188, 190,  
 191  
 Hay, D.A. 160, 186  
 Helpman, E. 173, 184, 187  
 Holahan, W. 186  
 Hotelling, H. 2, 5, 8, 11, 22, 23, 145
- Ireland, N.J. 187  
 Ironmonger, D.S. 184
- Judd, K.L. 160, 169, 186, 192
- Kaldor, N. 136  
 Kierzkowski, H. 173  
 Kleiman, E. 79  
 Koenker, R.W. 48, 188, 189  
 Kohlberg, E. 186  
 Koutsoyiannis, A. 4  
 Krugman, P.R. 173, 184, 187
- Lancaster, K.J. 2, 109, 164, 184, 187, 188  
 Lane, W.J. 29, 160, 186  
 Lerner, A.P. 186  
 Levhari, D. 74, 79  
 Lipsey, R. 27, 160, 161, 163, 164, 171, 186,  
 187, 191
- Mankiw, N.G. 60, 189  
 Mas-Colell, A. 191  
 Matutes, C. 191  
 Maskin, E.S. 27  
 Muller, E. 91
- Neven, D. 24, 170, 171, 185, 186, 190  
 Novshek, W. 28, 35, 145, 146, 186
- Oi, W.Y. 106  
 Ophir, T. 79  
 Osborne, M. 27
- Panzar, J.C. 190  
 Parks, R.W. 92  
 Peles, Y. 74, 91  
 Perloff, J.M. 42, 45, 137, 138, 140, 141, 144,  
 147, 150, 151, 154, 184, 188

- Perry, M.K. 48, 188, 189  
 Pettengill, J.S. 188, 189  
 Pitchik, C. 27  
 Prescott, E.S. 28, 29, 185
- Roberts, K.W.S. 137, 190  
 Robinson, J. 136  
 Rosenbluth, G. 160, 164, 187  
 Rothschild, M. 1
- Salant, D.J. 185, 186  
 Salop, S.C. 1, 17, 28, 35, 42, 45, 66, 67, 137, 138, 140, 141, 144, 145, 146, 147, 150, 151, 154, 184, 187, 188, 189  
 Sattinger, M. 188  
 Saving, T.R. 90, 91  
 Schmalensee, R. 4, 74, 79, 92, 160, 166, 170, 184, 186, 192  
 Shaked, A. 27, 114, 126, 133, 155, 159, 177, 184, 189, 190, 191, 193  
 Shapiro, C. 1  
 Sieper, E. 87  
 Singer, H.W. 186  
 Smithies, A. 185  
 Spence, A.M. 56, 69, 74, 75, 94, 137, 187, 188, 189
- Srinivasan, T.N. 79  
 Stahl, K. 33, 34  
 Steiner, P.O. 73  
 Stiglitz, J.E. 1, 45, 54, 58, 62, 63, 137, 148, 149, 188, 189  
 Su, T.T. 92  
 Sutton, J. 114, 126, 133, 155, 159, 177, 184, 190, 191, 193  
 Swan, P.L. 74, 80, 87, 89, 91  
 Sweezy, P.M. 40
- Thisse, J.F. 18, 22, 27, 177, 189, 190
- Van Damme, E. 190  
 Van Order, R. 186
- Venables, A.J. 173, 174  
 Visscher, M. 28, 29, 185
- Waterson, M. 189  
 Whinston, M.D. 60, 189  
 Willig, R. 190  
 Wolinsky, A.M. 137, 191  
 Wooders, M.H. 145, 146, 147, 186
- Yarrow, G.K. 66, 188, 189

## Subject index

- Address approach 5
- Agglomeration  
 agglomeration effect 24  
 agglomerated equilibrium 32–3  
 tendency for in product selection 22ff, 29ff
- Brand proliferation strategy 7, 12, 165, 166, 168, 170, 171, 191
- Chamberlinian paradigm or model 42–55, 135–59  
 and consumers' preferences 5, 11, 12, 42  
 market equilibrium in 43, 44, 52–5, 135–59  
 see also Monopolistic competition, Hotelling paradigm
- Characteristics approach 2
- Circular road model 17  
 comparative statics in 40–1
- Concentration, degree of 3, 133–4, 190  
 see also Market and Industrial Structure
- Contestable markets 134, 136  
 comparison with monopolistic competition 52  
 implications for international trade 179
- Costs of imperfect competition 56  
 see also Welfare costs
- Deterrence equilibrium 34
- Distribution consequences of product differentiation 9
- Durability 74, 80, 83–94
- Efficiency  
 versus variety or product diversity 9, 58
- Exit costs 169–70, 192
- Finiteness property 114–15, 120, 123–6, 132–4, 155–9
- First-mover advantages  
 in entry-deterrence models 171, 192
- Fixed-numbers equilibrium 163
- Gains from trade  
 in the short run 177–9  
 in the long run 179–82  
 under horizontal product differentiation 174–6  
 under product homogeneity 174  
 under vertical product differentiation 177–82
- Homogeneous products  
 and excessive entry 60
- Horizontal product attributes  
 combined with vertical attributes 132–3, 155  
 compared to vertical attributes 109
- Horizontal product differentiation  
 and consumers preferences 5, 11, 42  
 and market or industrial structure 114, 132–4, 135–55  
 and market or monopoly power 135–55  
 versus vertical product differentiation 4–5, 109, 155  
 see also Chamberlinian paradigm and Hotelling paradigm
- Hotelling paradigm or model 2, 5, 11ff  
 and consumers' preferences 5, 11ff  
 location choice in 22–34  
 long-run equilibrium in 34–41  
 price competition in 13–17  
 see also Spatial or Location models, Location choice, Product selection

- Imperfect competition
  - conditions for in large economies or markets 147–59
- Imperfect information
  - and tendency for agglomeration 30ff
- Industrial structure 1, 3, 114, 133–4
  - see also Market structure
- Integer problem 35, 45, 46
- Kinked equilibrium 37ff
- Limit theorems 34, 133, 135, 136, 159
- Limiting market equilibria 138
- Localised competition 12, 161, 165
- Location choice 22, 24–34
  - simultaneous with price choice 28
  - see also Product selection
- Locational equilibrium 27, 29, 171
- Location or spatial models 11–34
  - see also Hotelling paradigm
- Market power
  - under horizontal product differentiation 3, 135–55
  - under vertical product differentiation 3, 134, 155–9
- Market pre-emption 171
- Market structure
  - and product quality 73–108
  - under horizontal product differentiation 135–55
  - under horizontal and vertical differentiation 155–9
  - under vertical product differentiation 132–4
- Mill price 13, 14, 15, 17, 18, 35
- Monopolistic competition 6, 43, 44, 45, 46
  - and Chamberlin's large-group model 43, 46, 135
  - and monopoly or market power 135–55
  - Dixit and Stiglitz model 45, 47ff
  - Hart's definition of 45
  - Hart's model 138–40, 150–5
  - Perloff and Salop model 141–5
- Multi-brand competition 12
- Natural monopoly 114, 120ff
- Natural oligopolies
  - under vertical differentiation 114, 177
  - see also Finiteness property
- Non-address approach 5
- Oligopoly
  - quality choice under 94–105
  - versus social optimum in product diversity 64–7
- Perfect equilibrium 26–7, 28, 113, 123, 127, 135, 170
- Perfect-foresight equilibrium 28, 170
- Pioneering brands 171
- Preferences
  - asymmetric 5, 11ff, 42
  - symmetric 5, 42, 45, 46, 47
- Principle of Minimum Product Differentiation
  - Hotelling and 8, 22ff
  - refutation of 22–9
  - restoration of 29–34
  - see also Agglomeration, tendency for
    - Product diversity
    - in market equilibrium 45–55
    - in social optimum 56–9, 60–7
- Product reliability 105–8
- Product selection 22–34, 56–72
  - biases in 67–72
  - see also Location choice
- Pure profit
  - in free-entry equilibrium 160–5, 166
- Quality choice or selection
  - and market structure 73–105
  - under vertical product differentiation 126–32
  - welfare optimum and market equilibria 75
- Quality index 4–5
- Relocation costs 34, 161, 168, 171
- Representative consumer 6, 11, 42, 45, 48, 49, 58, 61, 64, 147, 148
- Sequential foresighted entry 28
- Social optimum
  - compared to the market:
    - in Chamberlinian models 61–4
    - in Hotelling-type models 66–7
    - in product selection 67–72
    - in quality choice 75–83, 94–105
    - under monopolistic competition 61–4

- under oligopoly 64–6
  - first-best 59, 60–7
  - second-best 59, 60–7
- Spatial or Location models 11–34
  - see also Hotelling paradigm
- Transport costs
  - in Hotelling model 13
  - significance for nature of equilibrium 17ff
  - see also Utility costs
- Utility costs
  - see also Transport costs
- Vertical product differentiation
  - and market or industrial structure 132–4, 155–9
  - and market or monopoly power 134, 155–9
  - and quality index 4–5, 109
  - compared to horizontal differentiation 4–5, 109, 132–4
  - see also Finiteness property, Natural oligopolies, Quality selection
- Welfare costs
  - under monopolistic competition 56, 59
  - under oligopoly 59
  - see also Costs of imperfect competition
- Zero conjectural variation 28