INDEX

Page numbers followed by “f” refer to figures; page numbers followed by “b” refer to boxes; page numbers followed by “t” refer to tables; page numbers followed by “fn” refer to footnotes.

Absorbing barriers, in path dependence, 315
Abuse of dominant position, 183
Access pricing, 78–82, 80b–81b
Acquisitions, 277–285. See also Mergers
Advertising, 223–235
by diamond industry, 229–230
and drug prices, 4–5
and entry cost, 247–248
expenditure on, and product quality, 226
intensity of, 227–230, 227f–228, 229f
market structure and, 229–230
sensitivity of demand curve to, 227–228, 227f–228f
as inter-retailer externality, 194
optimal values of, 229f
persuasion vs. information in, 223–225, 224b–225b
price competition and, 231–235, 233b
and “prisoner’s dilemma,” 234
and public good, 229
signalling in, 225–226
social value of, 224
“wasteful,” 226
Advertising-to-revenue ratio, 227, 251f
Agency theory, 36
Aircraft industry
learning curve in, 44, 44fn, 301
market entry in, 246–247
Airline industry
entry deterrence in, 264
market power of, 6, 7
mergers in, 281
predatory pricing in, 269–270, 272fn, 276b
price dispersion in, 218–219
strategic behavior in, 259
in United States, multimarket contact in, 139b
Allocative efficiency, 8, 26–27
in Cournot model, vs. monopoly, 154f
in monopolistic competition, 94
AM radio, vs. FM radio, 321b
Anheuser-Busch, price discrimination by, 182
Antidepressants, research and development on, 300, 300t
Arbitrage, 168fn
Areeda-Turner test, 274
Aspartame
and entry deterrence by Monsanto, 267, 268f
Nutrasweet, advertising of, 232
Atomicity, and perfect competition, 85
AT&T
as dominant firm, 71t, 71–72
rent seeking by, 9
Austrian school of economics, 9
Automobile industry, European, price discrimination in, 171b
Automobiles, demand for, product differentiation and, 207–209, 208t, 210b–211b
Average cost, 18–20, 19f
Average cost pricing, in regulated monopolies, 76, 77f
Backward induction, in sequential games, 56
Bandwagon effect, 324
Banking industry
business stealing effect in, 253
U.S., profit maximization by, 39b
Beer industry, entry costs in, 247–248
Belgium, industry concentration in, 241, 242f
Bertrand model
equilibrium, 102–104, 103f–104f
vs. Cournot model, 113–114
vs. Hotelling model, 214
BetaMax, vs. VHS
incompatibility of, 324
path dependence and, 315–316, 316f, 317b–318b
Blockaded entry, 262, 262f
Boards of directors, composition of, 37b
Branded drugs, advertising of, 225b, 230
Brand equity, 231
Breakfast cereal industry, product proliferation in, 265–267
British Airways, predatory pricing by, 272, 272fn
British Sky Broadcasting Group, market power of, 7
Bromide industry, price wars in, 138
Browsers, Microsoft’s control of, 74b
Bundling, 178–179, 273–274
Business stealing effect, 253
Cable television industry, predatory pricing by, 273
Calibration, 120
Capacity choice, and entry cost, 285
Capacity constraints, pricing with, in oligopoly, 104–107, 106f
Capital markets, and profit maximization, 38, 40
Cartels, 127
bromide, 138
diamond, 132b
Causal ambiguity, 43
Cellular phone industry. See also Telecommunications industry nonlinear pricing in, 174b
standardization of service in, 327
Central Selling Organization (CSO), 132b
Characteristics approach, to product differentiation, 207–209, 208fn, 208t, 210b–211b
Chicago school of economics on market power, 9–10
on predatory pricing, 270–271
Colgate, advertising of toothpaste by, 233b
Collusion, 127–145
disincentives to, 130–133, 132b
Collusion (continued)
factors facilitating, 137–142
institutional, 140–142, 142b–143b
market structure as, 137–138, 138fn
multimarket contact as, 138–140, 139b, 141b
and market power, 160
and price wars, 133–137, 134b. See also Price wars
public policy and, 144–145
secret agreements and, 127
stability of, repeated interaction and, 128–133, 132b
tacit agreements and, 127
vertical restraints as, 197, 199
Collusion effect, of mergers, 283
Collusion hypothesis, of market power-market concentration relationship, 158–159
Columbia
competition with RCA for development of quadraphonic sound, 322b–323b
purchase by Sony, 277
Commitment, credible, in sequential games, 57–58, 57f–58f
Comparative statics, in Bertrand and Cournot models, 114–124, 115f–119f, 123f
Competition
among manufacturers, 196–199
dynamic, in oligopoly, 105
and incentive for research and development, 292–295, 293fn
monopolistic, 91–94, 92f–93f
perfect, 85–87. See also Perfect competition
product market, and profit maximization, 38
Competitive advantage, sustainable, 246
Competitive selection, in perfect competition, 89–91
Computer memory, research and development in, 301, 302t
Concrete market, in Denmark, collusion in, 143b
Conduct parameter, price and, 161, 161t
Constant returns to scale, 24
Consumer sorting, 175–180, 177b bundling and, 178–179
durable-goods prices and, 179–180
versioning and, 176–178, 177b
Consumer’s surplus, 16, 16f, 26, 29
Contracts
and entry deterrence, 267–269, 268b
nonlinear, in vertical relations, 192, 192fn
Copier industry, research and development in, 296, 297b
Copyrights, 304
Corporate raiders, 38, 38fn
Cost, 18–24, 19f
average, 18–20, 19f
economic, 23
fixed, 18, 21b
marginal, 18–20, 19f, 29. See also Marginal cost
opportunity, 20–23, 21b–22b, 29
sunk, 20–23, 21b–22b
total, 18
variable, 18, 21b
Cost efficiency, mergers and, 278–279
Cournot model, 107–112, 108f–112f
allocative inefficiency in, vs. allocative inefficiency in monopoly, 154f
comparative statistics in, 114–124, 115f–119f, 123f
dynamic interpretation of, 123f, 123–124
equilibrium in, 110fn, 110–111, 111f
vs. Bertrand model, 113–114
Creative destruction, 295, 297–298, 299b
Credit card industry, competition in, 205–206
Critical mass, in network externalities, 313f, 313–314
CSO (Central Selling Organization), 132b
Culture, of firms, 44
Customer markets, 133
DaimlerChrysler merger, 279b
Damaged goods, and versioning, 176–178, 177b
DeBeers diamond cartel, 132b
Decision node, 55, 56f
Demand, 15–17, 16f–17f
fluctuations in, and price wars, 135f, 135–136
Demand curve, 16f, 16–17, 29
market, 16–17, 17f
and price, 161–162
sensitivity to advertising expenditures, 227–228, 227f–228f
Demand elasticity, 17
market power and, 160
and monopoly power, 73
and optimal monopoly margin, 69–70, 70f
Demand shocks, and price wars, 135–136
Deregulation, in telecommunications industry, 80b–81b
and productivity, 255b
Deutsche Telekom, access pricing by, 80b–81b
Diamond cartel, 132b
advertising by, 229–230
Digital Versatile Disks (DVD), standardization of, 327
Disclosure requirements, of patents, 305–306
Discount factor, 129–130
 Diseconomies of scale, 24, 245
Doctrine of equivalents, 304
Dog food industry, multimarket contact in, 141b
Dominant firms, 69, 70–72, 71t, 72f
optimal price of, 72, 72f
telephone companies as, 71t, 71–72
Dominant position, abuse of, 183
Dominant strategies, 51
Dominated strategies, 51–53, 52f–53f
Double marginalization, 190–192, 191f
Downstream firms
competition among, 193
vertical relations with, 189–190
vs. upstream firms, 79, 81
DRAMs (Dynamic Random Access Memories), research and development in, 301, 302t
Drastic innovation, vs. gradual innovation, 298
Drugs
branded vs. generic, advertising of, 225b, 230
price of, 4–5
Duopoly. See Oligopoly
DuPont, entry deterrence by, 260, 261b
Durable-goods prices, 179–180
DVD (Digital Versatile Disk), standardization of, 327
Dynamic competition, in oligopoly, and pricing, 105
Dynamic efficiency, 27–29
Dynamic Random Access Memories (DRAMs), research and development in, 301, 302t
Easyjet
predatory pricing by, 269–270
strategic behavior of, 259
eBay, network externalities and, 314, 314fn
Economic cost, 23
Economies of scale, 23–24
and market concentration, 245
Economies of scope, 23–24
ECPR (Efficient Component Pricing Rule), 81–82
Efficiency, 26f, 26–29, 28f
allocative, 26–27
dynamic, 27–29
mergers and, 285
price discrimination and, 181
in production, 27, 28f
and research and development, 295–297, 297b
static
in perfect competition, 86, 96
vs. dynamic, 28
Efficiency effect, 296
Efficiency hypothesis, of market power-market concentration relationship, 159
Efficient Component Pricing Rule (ECPR), 81–82
Elasticity rule, 70, 70f
in price discrimination, 171–172
Electrical utilities, as natural monopolies, 78–79
Eli Lilly, research on insulin by, 296–297
Endogenous entry costs, vs. exogenous entry costs, 247–252, 251t, 251f–252f
Entry accommodation, 262, 263f
Entry cost
advertising and, 247–248
and capacity choice, 285
endogenous vs. exogenous, 247–252, 251t, 251f–252f
and market structure, 243–247
and social welfare, 242–254, 253f
Entry deterrence, 260–269
and blockaded entry, 262, 263f
commitment and, 263–264
contracts and, 267–269, 268b
product proliferation and, 265–267
Entry rates, in perfect competition, 88, 88t
EPROMs (Erasable Programmable Read Only Memories), research and development on, 301, 302t
Equilibrium
free-entry, 243
fulfilled-expectation, 312
long-run
in monopolistic competition, 93, 93f
in perfect competition, 87
Nash. See Nash equilibrium
in repeated games, 60–62, 128
short-run, in monopolistic competition, 92, 92f
Erasable Programmable Read Only Memories (EPROMs), research and development on, 301, 302t
Essential facilities, regulation of, 78–82, 80b–81b
ETSI (European Telecommunications Standards Institute), 327
European Telecommunications Standards Institute (ETSI), 327
Excess inertia, vs. excess momentum, and network externalities, 319–324, 320f, 321b–323b, 323f, 328
Exchange rate, fluctuations in, and market shares, 117–120, 118f
Exclusive dealing, 197
Exclusive territories, 194
Exit rates, in perfect competition, 88, 88t
Exogenous entry costs, vs. endogenous entry costs, 247–252, 251t, 251f–252f
Experience goods, 223
Externalities, 127
investment, and vertical relations, 193–194
network. See Network externalities
Exxon, merger with Mobil, 10
Fax machines, installed base for, critical mass in, 313f, 313–314
Firms
boundaries of, 40–42
culture of, 44
dominant, 69, 70–72, 71t, 72f
optimal price of, 72, 72f
telephone companies as, 71t, 71–72
growth of, in perfect competition, 88
heterogeneity of, and efficiency of free entry, 254
horizontal extension of, 40
performance of, differences among, 42–44
profit maximization by, 35–40, 37b, 39b
size of, in perfect competition, 88–89, 89f
survival of, in perfect competition, 88
First-degree price discrimination, 170
First-mover advantage, 246
Fisher Body, vertical integration by, 41–42
Fixed cost, 18
and shut-down decision, 21b
FM radio, vs. AM radio, 321b
Foreclosure, and manufacturer competition, 196–197
France, industry concentration in, 241, 242f
France Telecom, deregulation of, and entry deterrence, 264–265, 266b
Franchising, 42
Free entry
equilibrium, 243
product differentiation and, 254, 256
and social welfare, 252–254, 253f
Free-rider problem, in research and development, 306
Fulfilled-expectation equilibrium, 312
Games, 49, 62
centipede, 65, 66f
cover-story, 63, 64f
Games (continued)
   extensive form of, 55, 56f, 62
   normal form of, 50, 62
   “prisoner’s dilemma,” 50f, 50–51
   repeated, 59–62, 60f
   retaliation in, 59
   sequential, 55–59, 56f–59f
   backward induction in, 56
   credible commitment in, 57–58, 57f–58f
   decision node in, 55, 56f
   game tree in, 55, 56f
   long-run and short-run strategies in, 59, 59f
   subgames of, 56–57
   stage, 60, 60f
   Game tree, 55, 56f
   Gasoline stations, predatory practices by, 275b
   Genentech, research on insulin by, 296–297
   General Motors, vertical integration by, 41–42
   Generic drugs
   advertising of, 225b, 230
   price competition by, 4–5
   Glaxo Wellcome, pricing of Zantac by, 4
   Gradual innovation, vs. drastic innovation, 298
   Grim strategies, 128
   Herfindahl index, 155
   High-power incentive mechanisms, 77, 82
   Hold-up problem, 41
   Horizontal extension, of firms, 40
   Horizontal mergers, See Mergers
   Horizontal product differentiation, 206–209, 210b–211b
   Hotelling model, 212, 212f–213f
   Nash equilibrium for, 213f, 214–215
   price competition and advertising, 232–233
   vs. Bertrand model, 214
   IBM
   production of damaged goods by, 177b
   research on plain paper copiers by, 296, 297b
   Impediments to imitation, 43
   Imputed cost. See Opportunity cost
   Incentive-compatibility constraint, in nonlinear pricing, 175
   Incentive mechanisms, high-power vs. low-power, 77
   Industrial organization, 3
   central questions in, 6–11
   example of, 4–5
   Industrial policy, 11
   Industry, 3
   Inertia, excess, vs. excess momentum, 319–324, 320b–323b, 323f
   Information, vs. persuasion, in advertising, 223–225, 224b–225b
   Innovation, gradual vs. drastic, 298
   Input costs, and output price, 115f, 115–117
   Insulin manufacturers, research and development by, 296–297
   Intel, production of damaged goods by, 177b
   Interconnection decision, in deregulation, 80b–81b
   Interdependent decision-making, 49
   Internet browsers, Microsoft’s control of, 74b
   Investment externalities, and vertical relations, 193–194
   Japanese Ministry of Industry and Foreign Trade, 11
   Joint Executive Committee, 134b
   JVC, development of videocassette recorders by, 317b–318b
   Keiretsu, 42, 42fn
   KLM, predatory pricing by, 269–270
   Kodak, bundling by, 273–274
   Kraft, merger with Philip Morris, 277
   Labor market, and profit maximization by firms, 36–37
   Laser industry, competitive selection in, 90–91
   Law of one price, 167
   Learning curves, 44
   and research and development, 301, 302t
   Lerner index, 154–155
   Lloyd’s TSB, efficiency of, 38
   Location, and product differentiation, 211–215, 212f–213f
   Long-distance telephone rates, 71t
   Long-purse theory, of predatory pricing, 270–271
   Long-run equilibrium in monopolistic competition, 93, 93f
   in perfect competition, 87
   Low-cost signaling, and predatory pricing, 271–272
   Lowest-price guarantee, 180, 180fn
   Low-power incentive mechanisms, 77
   Lybra, advertising of, 230
   Managers
   goals of, vs. shareholders, 35–36
   reputation of, and profit maximization, 36–37
   Marginal cost, 18–20, 19f, 29
   Marginal revenue, 25
   in perfect competition, 86
   Market concentration in different sectors, 241, 242f
   economies of scale and, 245
   and market power, 151–156, 152f–153f, 154t
   empirical estimation of, 156–159
   measurement of, 154–155
   simultaneity problem in, 157–158
   market size and, 243–244
   minimum efficiency scale and, 244
   Market demand curve, 16–17, 17f
   Market power, 6
   acquisition of, 7
   collusion and, 160
   demand elasticity and, 160
   empirical estimation of, 159–162, 161t
   extent of, 6–7
   implications of, 8–9
   maintenance of, 7–8
   market concentration and, 151–156, 152f–153f, 154t
   empirical estimation of, 156–159
   measurement of, 154–155
   simultaneity problem in, 157–158
   product differentiation and, 209–215, 212f–213f
   public policy on, 9–11
   Market segmentation, 170
   Market size, and market concentration, 243–244
   Market structure and advertising intensity, 229–230
   and collusion, 137–138, 138fn
and incentives for research and development, 292–295, 293f
MasterCard, antitrust lawsuit against, 294
Matsushita, development of videocassette recorders by, 317b–318b
Mergers, 277–285
causes of, 277–278
collusion effect of, 283
and efficiency, 278–279, 285
implications of, 278–281, 279b, 286
market definition and, 284
and price increases, 283
public policy on, 283–285
and stock prices, 281
and synergies, 278
and total output, 280
unilateral effect of, 283
waves of, 281–283, 286
Microeconomics, principles of, 15–29
Microsoft
bundling by, 178–179
monopoly power of, 74b
predatory practices by, 273
vertical restraints by, 198b
Minimum efficiency scale, 24
and market concentration, 244
MITI, and industrial policy, 11
Mixed bundling, 178
Mobil, merger with Exxon, 10
Mobile phone industry, nonlinear pricing in, 174b
Models, stylized nature of, 49fn
Monopolies, 69–75, 70f, 71t, 72f, 74b
access pricing by, 78–82, 80b–81b
allocative inefficiency in, vs. allocative inefficiency in Cournot model, 154f
dominant firms and, 70–72, 71t, 72f
as essential facilities, 78–82, 80b–81b
and incentive for research and development, 292–297, 293f, 297b
natural, 75
utility companies as, 78–79
optimal margin of, demand elasticity and, 70, 70f
power of. See Monopoly power pure, 69
regulation of, 75–78, 76f–77f
average cost pricing and, 76, 77f
price-cap, 77–78
vs. nonregulation, 76f
Monopolistic competition, 91–94, 92f–93f
allocative inefficiency in, 94
long-run equilibrium in, 93, 93f
short-run equilibrium in, 92, 92f
similarities with perfect competition, 94–95, 95f
Monopoly power, 72–75, 74b
demand elasticity and, 73
market definition and, 73
public policy and, 73
Monsanto, entry deterrence by, 267, 268b
Most-favored-customer clauses, and collusion, 141
Multimarket contact, and collusion, 138–140, 140b
Nash equilibrium, 53–55, 53f–54f, 54fn, 62
in Bertrand model, 103–104, 104f
in Cournot model, 103–104
in Hotelling model, 213f, 214–215
with network externalities, 312
National Cooperative Research Act of 1984, 307
Natural monopolies, 75
utility companies as, 78–79
NEIO (New Empirical Industrial Organization), 160
Nestlé
acquisition of Rowntree by, 277
merger with Perrier, 283–284
Network externalities, 275
compatibility and, 324–326
consumer expectations and, 312–314, 313f
critical mass in, 313f, 313–314
excess inertia and, vs. excess momentum, 319–324, 320f, 321b–323b, 323f, 328
Nash equilibrium with, 312
path dependence and, 314–319, 316f, 317b–318b
public policy and, 326–328
New Empirical Industrial Organization (NEIO), 160
Newspaper industry, in Britain, price wars in, 136–137
Nintendo, R&D competition with Sega, 298, 299b
No-deviation constraints, 128–129
Nondisclosure agreements, 294
Nonlinear contracts, in vertical relations, 192, 192fn
Nonlinear pricing. See Pricing, nonlinear
Nutrasweet
entry deterrence by, 267, 268b
vs. aspartame, advertising of, 232
Ocean shipping, anti-collusion policies affecting, 145
Office Depot, merger attempt with Staples, 284
Office of Fair Trading, 10
Oligopoly, 101
Bertrand model of, 102–104, 103f–104f. See also Bertrand model
Cournot model of, 107–112, 108f–112f. See also Cournot model
dynamic competition in, and pricing, 105
interdependence of firms in, 101–102
Nash equilibrium in, 103–104, 104f
Online auction houses, network externalities and, 314, 314fn
Opportunity cost, 20–23, 21b–22b, 29
Organizational inertia, 302
Output adjustment of, vs. price, 114
level, choice of, 24–25
marginal cost and, 115, 115fn, 116f
Participation constraint, in nonlinear pricing, 175
Patents, 303–306, 305f
breadth of, 303–304
disclosure requirement of, 305–306
and entry deterrence, 267–269, 268b
strength of, 304–305, 305f
Path dependence, and network externalities, 314–319, 316f, 317b–318b
Perfect competition, 85–87
assumptions of, 85–86
efficiency of, 86, 90–91
long-run equilibrium in, 87
long-run profits in, 87
marginal revenue in, 86
Perfect competition (continued) as model for markets with many firms, 153–154, 154f
profit in, 94
similarities with monopolistic competition, 94–95, 95f
Perfect discrimination. See Price discrimination, first-degree
Perfect information, and perfect competition, 86
Perrier, merger with Nestlé, 283–284
Persuasion, vs. information, in advertising, 223–225, 224b–225b
Pharmaceutical industry advertising of branded vs. generic drugs by, 225b, 230
price discrimination by, 182
price margins set by, 4–5
research and development in, on antidepressants, 300, 300f
Philip Morris, merger with Kraft, 277
Photolithographic alignment industry, research and development in, 301–302, 302f
Plain paper copier industry, research and development in, 296, 297b
Post-contractual opportunism, 41
Predatory practices debate on existence of, 274
by gasoline stations, 275b
identification of, 274, 275b–276b
legality of, 276
nonpricing, 273–274
public policy on, 274–277
and social welfare, 274–277
Predatory pricing, 269–277, 275b–276b
growing markets and, 272–273
low-cost signaling and, 271–272
reputation for toughness and, 272
theories of
Chicago school of economics, 270–271
long-purse, 270–271
Price adjustment of, vs. output, 114
increases in, mergers and, 283
marginal cost and, 161f, 161–162
Price-cap regulation, of monopolies, 77–78
Price cuts, secret, and price wars, 133, 135
Price discrimination, 167–184
cost differences and, 168
and efficiency, 181
first-degree, 170
legality of, 180–183
resale and, 167–168
Robinson-Patman Act and, 182
second-degree, 169–170, 184
self-selection and, 169
types of, 169–170
Price dispersion, 218–219, 219f
Price fixing. See Collusion
Price takers, 86
Price wars, 133–137, 134b
asymmetric shocks and, 136–137
demand fluctuations and, 135f, 135–136
secret price cuts and, 133, 135
Pricing nonlinear, 169, 172–175, 173f, 174b
incentive-compatibility constraint in, 175
participation constraint in, 175
two-part tariff in, 172–175, 174b
in oligopoly with capacity constraints, 104–107, 106f
product differentiation and, 105
See also Predatory pricing “Prisoner’s dilemma” game, 50f, 50–51
advertising and, 234
Procter and Gamble (P&G), advertising of toothpaste by, 233b
Producer’s surplus, 26
Product differentiation characteristics approach to, 207–209, 208f, 208t, 210b–211b
free entry and, 254, 256
horizontal, 206–209, 208t, 210b–211b
Hotelling model of, 212, 212f–213f
imperfect information and, 217–219
location and, 211–215, 212f–213f
and market power, 209–215, 212f–213f
price dispersion and, 218–219, 219f
product positioning and, 215–217, 216f
spurious, 233
switching costs and, 217–219
vertical, 206–209, 208f, 210b–211b
Product homogeneity, and perfect competition, 85
Product market competition, and profit maximization, 38
Product positioning, 215–217, 216f
direct effects of, 216, 216f
strategic effects of, 216
Product proliferation, and entry deterrence, 265–267
Product quality, advertising expenditure and, 226
Productive efficiency, 8, 27, 28f
deregulation and, in telecommunications industry, 255b
Profit entry deterrence and, 260, 260f, 262
long-run, in perfect competition, 87
maximization of, 24–25
by firms, 35–40, 37b, 39b. See also Firms, profit maximization by
in monopolistic competition, 94, 94f
in perfect competition, 94
Public policy and collusion, 144–145
and market power, 9–11
and mergers, 283–285
and monopoly power, 73
and network externalities, 326–328
and predatory practices, 274–277
and research and development, 303–308, 305f
agreements related to, 306–308
patents and, 303–306, 305f. See also Patents
and vertical restraints, 199–200
Pure bundling, 178
Pure monopoly, 69
Quadraphonic sound technology, failure of, 322b–323b
QWERTY typewriter system, path dependence and, 316–317
Raiders, 38, 38fn
Rate-of-return regulation, of monopolies, 76–77
RCA, competition with Columbia for development of quadraphonic sound, 322b–323b
R&D. See Research and development (R&D)
Reaction function in Bertrand model, 102–103, 103f
in Cournot model, 109f, 109–110
Ready-mixed concrete market, in Denmark, collusion in, 143b
Redsyke Quarry, and opportunity cost, 22b
Regulation and market power, 9–10
of monopolies, 75–78, 76f–77f
Regulatory capture, 76
Regulatory lag, 77
Rent seeking, 8–9
Repeated games, 59–62, 60f, 128
Replacement effect, 294, 297–298, 299b
Resale, and price discrimination, 167–168
Resale price maintenance (RPM), 194–195
Research and development (R&D), 291–308
agreements concerning, 306–308
and creative destruction, 297–298, 299b
efficiency and, 295–297, 297b
expenditure on, 291, 292t
free-rider problem in, 306
incentive for, 308
learning curve and, 301, 302t
market structure and, 292–295, 293f
public policy and, 303–308, 305f
agreements concerning, 306–308
patents and, 303–305, 305f. See also Patents
replacement effect and, 297–298, 299b
risk choice and, 299–301, 300t
spillover in, 306
Residual demand, in Cournot model, 108
Retailers
competition among, and vertical relations, 193
selling to, vs. selling to consumer, 189, 189fn
Retaliation, in games, 59
Risk, choice of, in research and development, 299–301, 300t
Risk-neutral agents, 36fn
Robinson-Patman Act, 182
Rowntree, acquisition by Nestlé, 277
RPM (resale price maintenance), 194–195
Sacom case, 73
Scale economies, and market concentration, 245
Schumpeter, Joseph, 9, 293
SCP (structure-conduct-performance) paradigm, 12, 156
simultaneity problem in, 157–158
Search cost, 217
Search goods, 223
Second-degree price discrimination. See Price discrimination, second-degree
Secret agreements, and collusion, 127
Sega, R&D competition with Nintendo, 298, 299b
Selection by indicators, and price discrimination, 169
Self-selection, and price discrimination, 169
Sequential games, 55–59, 56f–59f. See also Games, sequential
Shareholders, goals of, vs. managers, 35–36
Sherman Act, 144
Shipping industry anti-collusion policies affecting, 145
price wars in, 134b
Short-run equilibrium, in monopolistic competition, 92, 92f
Signaling in advertising, 225–226
low-cost, and predatory pricing, 271–272
Simultaneity problem, in structure-conduct-performance paradigm, 157–158
Social welfare advertising and, 229
free entry and, 252–254, 253f
predatory practices and, 274–277
price discrimination and, 180–183
Software, upgrades of, excess momentum and, 324
Sony
development of videocassette recorders by, 317b–318b
production of damaged goods by, 177b
purchase of Columbia by, 277
Spandex, advertising of, 230
Spatial price discrimination, 170
Specific assets, 41
Spillover, in research and development, 306
Spurious product differentiation, 233
Stage games, 60, 60f
Standardization, in development of new technology, 325–328
Staples
entry deterrence by, 267
merger attempt with Office Depot, 73, 75, 284
Static efficiency in perfect competition, 86, 96
vs. dynamic efficiency, 28
Stock prices, mergers and, 281
Strategies
choice of, 50
dominant, 51
dominated, 51–53, 52f–53f
and firm performance, 43–44
grim, 128
long-run and short-run, in sequential games, 59, 59f
and Nash equilibrium, 53–55, 53f–54f, 54fn, 62
in repeated games, 60
Structure-conduct-performance (SCP) paradigm, 12, 156
simultaneity problem in, 157–158
Structure-performance hypothesis, 157
Subgames, 56–57
Sunk cost, 20–23, 21b–22b
Supermarket industry, mergers in, 282
Supplier contracting, 42
Surplus
consumer’s, 16, 16f, 26, 29
producer’s, 26
total, 26
and allocative efficiency, 27
Sustained competitive advantage, 42, 246
Switching costs, 217–219
Synergies, mergers and, 278
Tacit agreements, and collusion, 127
Takeovers, threat of, and profit maximization, 38, 38fn, 39b
Tapered integration, 42
Tariff, two-part, 174b, 174–175
and vertical relations, 190–192, 191b
Technology
access to, and entry cost, 245–247
adoption of, excess inertia vs. excess momentum in, 319–324, 320f, 321b–323b, 323f
development of, standardization in, 325–328
path dependence and, 314–319, 316f, 317b–318b
Telecom Corporation of New Zealand, access pricing by, 82
Telecom Italia, deregulation of, and entry deterrence, 264–265
Telecommunications industry
deregulation of, 80b–81b
and productivity, 255b
dominant firms in, 71, 71–72
entry deterrence in, 264–265, 266b
in Europe, mergers in, 282–283
license allocation in, and entry cost, 248–249
mobile phone, nonlinear pricing in, 174b
wireless, standardization of service in, 327
The Times, pricing by, 10
Third-degree price discrimination, 170–172, 171b, 184, 194
Tie-in sales, 178–179
Titanium dioxide industry, and entry deterrence by DuPont, 260, 261b
Toothpaste, advertising of, 233b
Total cost, 18
Total surplus, 26
and allocative efficiency, 27
Tourists-locals model, 219
Treaty of Rome, 73, 144
on research and development agreements, 307
and vertical restraints, 199–200
Turbine generator market, collusion in, 142b
Two-part tariff, 172, 174b, 174–175
and vertical relations, 190–192
Tying, 178–179, 273–274
Type writer keyboard layout, path dependence and, 316–317
Ulcer medications, price of, 4–5
United Brands, price discrimination by, 182
Upstream bottleneck, 79, 81
Upstream firms, vertical relations with, 189–190
Utility companies, as natural monopolies, 78–79
Variable cost, 18
and shut-down decision, 21b
VCR (videocassette recorder) industry, path dependence in, 315–316, 316f, 317b–318b
Venture capitalists, nondisclosure agreements with, 294
Versioning, 176–178, 177b
Vertical integration, by firms, 40–42
Vertical product differentiation, 206–209, 210b–211b
Vertical relations, 189–200
as collusion device, 197, 199
double marginalization in, 190–192, 191f
indirect control of, 194–195
investment externalities and, 193–194
legality of, 199–200
manufacturer competition and, 196–199
nonlinear contracts in, 192
retailer competition and, 193
VHS, vs. Betamax
incompatibility of, 324
path dependence and, 315–316, 316f, 317b–318b
Videocassette recorder (VCR) industry, path dependence in, 315–316, 316f, 317b–318b
Video game industry, research and development competition in, 298, 299b
Virgin Atlantic, predatory pricing by, 272, 272fn
Visa, antitrust lawsuit against, 294
Welfare. See Social welfare
Willingness to pay, 15–16, 16f
Windows operating system, and monopoly power, 74b
Wireless telecommunications industry, standardization of service in, 327
Xerox, research on plain paper copiers by, 296, 297b
Yoplait yogurt, advertising of, 224b
Zantac, Glaxo Wellconme’s pricing of, 4