## Contents

Preface to the Second Edition vii

**Part I: The Economics of Relationships**

1. The Economics of Relationships (and Porter’s Five Forces) 3
2. Noncooperative Game Theory 8
3. Reciprocity and Collusion 48
4. Credibility and Reputation 71
5. Transaction-Cost Economics 96

**Part II: Pricing with Market Power**

6. Marginal Cost Equals Marginal Revenue 123
7. Mark-Up Pricing and Elasticity 155
8. Price Discrimination 175
9. Channels of Distribution and Double Marginalization 196

**Part III: Bang for the Buck: Optimization Under Constraint**

10. The Utility-Maximizing Consumer 219
11. Technology and Cost Minimization 247
12. Multiperiod Production and Cost 267

**Part IV: Competitive Markets**

13. The Most Famous Picture in Economics 293
14. Competitive Firms in Competitive Markets 306
15. The Invisible Hand 334
16. Taxes, Subsidies, Administered Prices, and Quotas 353
17. Externalities 377

**Part V: Uncertainty and Information**

18. The Expected-Utility Model 399
19. Risk Sharing and Spreading: Securities and Insurance Markets 428
20. Hidden Information: Adverse Selection, Signaling, and Screening 446
21. Hidden Action: Moral Hazard and Incentives 468

Index 489
1. The Economics of Relationships (and Porter’s Five Forces)

This first part of this book concerns the economics of relationships. In this chapter, we explain what this means and motivate what is to come by asking the question, What makes some industries more profitable than others?

Which industries are more profitable, and which are less? And why?

While there is no obvious measure of industry profitability, it is pretty clear that firms in some lines of business “do better” on average than do firms in other industries. For instance, Cynthia Montgomery\(^1\) measures the average return on equity for firms in different industries over the period 1990 to 2010, finding the tobacco industry in first place with an ROE of over 30%, while pharmaceuticals averaged nearly 20%, automobile-industry firms averaged around 10%, and airlines averaged −9% or so. Michael Porter\(^2\) provides average return on invested capital (earnings before interest and taxes divided by invested capital less excess cash) for the period 1992 to 2006, and while he doesn’t supply numbers for the tobacco industry or the automobile industry, he has airlines at 5.9% and pharmaceuticals at 31.7%. (Mobile Homes recorded 15.0% and Tires, 19.5%.)

One can certainly argue with the specific measures these analyses employ.\(^3\) But it can’t be disputed that some industries are more profitable—whatever that vague term means—averaging over the firms in the industry, than others. Why?

Porter, in the classic business strategy textbook *Competitive Strategy*,\(^4\) provides a framework for trying to answer this question, called the Five Forces. This framework takes the form of a checklist: Here are the (five) categories of things to investigate concerning a specific industry, to understand how profitable are the firms in that industry. The five categories, or forces, and the basic logic behind including them on this checklist, are:

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3. In particular, if, say, the return on equity for firms in the tobacco industry is three times the ROE for firms in the automobile industry, why doesn’t the market price of equity in the tobacco industry increase relative to the price of equity in automobiles? Readers who have studied finance can offer a variety of explanations, such as that future prospects for earnings versus current earnings are higher in automobiles than in tobacco; the price of equity concerns future prospects, which may not be perfectly correlated with current earnings. Note: this is a question about using the E part of ROE as a measure of profitability and not about the basic assertion that some industries are “more profitable” on average than others.

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1. The Economics of Relationships (and Porter’s Five Forces)

• **Barriers to entry.** If firms within an industry are relatively profitable, the industry will attract new entrants, to the extent that there are no barriers in the way of those entrants. And those new entrants will tend to compete away the relatively good profits that drew their attention. So, high barriers to entry tend to go along with supernormal profitability. (And, for declining industries, barriers to exit will mean subnormal profits, insofar as firms in the industry find it hard to get out.)

• **Substitute and complementary products.** Firms inside an industry are more profitable the higher the prices they can charge their customers. Insofar as there are substitutes for what the firms are selling, they are limited in how high they can raise their prices. Hence, an industry whose products have a lot of good substitutes is likely to be less profitable on average than one whose products have few, bad, or no substitutes. On the other side, demand for an industry’s products or services is higher—and they can charge higher prices, hence be more profitable—the more available and cheaper are goods that are complementary to what they sell. (Automobile manufacturers are more profitable, for instance, when the price of fuel is lower.)

• **Supplier power.** Suppose firms in an industry are making supernormal profits. Suppliers to the industry, if they can, will suck those profits upstream, lowering those profits. The key here is the italicized if they can: It is a matter of the relative bargaining strength of the suppliers to the industry vis-à-vis firms in the industry. If there are lots of potential suppliers who compete among themselves, firms in the industry needn’t worry much about having their profits sucked upstream. If a critical input to the industry is supplied by a single and powerful supplier, firms in the industry must worry, and perhaps even resign themselves to not being hugely profitable.

• **Customer power.** The category of substitutes captures one aspect of the relationship between firms in the industry and their customers: Can customers find good alternatives to what the firms in the industry are selling? But even if there are no good substitutes, customers maybe able to bargain for low prices. Suppose, for instance, that a large share of the retail market in a particular good is held by Walmart. Firms that manufacture this good probably don’t get very high margins on what they sell to Walmart for resale.

• **Rivalry.** The fifth and final of Porter’s forces is rivalry: How hard do firms within the industry compete with one another? If competition among firms in the industry is fierce, with price cutting and price wars the norm, profits will be relatively low. If firms in the industry compete in restrained fashion, profits are more likely to be relatively high.
Those are Porter’s Five Forces. We might consider adding a sixth to his list, namely the force of the legal, political, and social environments within which the industry operates. Legal forces certainly affect what firms can and cannot do—think of the impact of antitrust laws, or regulatory forces—and, perhaps more subtly, the political and social environments can be important as well. Some aspects of the legal, social, political, and social environments can be incorporated into Porter’s original list of five. For instance, laws against explicit bargains between rivals can and should be considered under rivalry. One important factor of production in most industries is labor, and laws regarding the ability of employees to organize (form a union) and general societal norms about how unions, where they exist, interact with management, should certainly be part of your analysis of supplier power.

But some aspects of the legal, political, and social environments don’t fit so neatly into one of Porter’s five categories. Can firms within the industry rely on their lobbying power to gain favorable treatment by the government? Do social concerns about the industry’s products (think, tobacco; power generation using fossil fuels; lumber and paper products) affect the taxes they face or just the hostility their products arouse in the general populace? Are firms affected, for good or for ill, by temporal shifts in social mores? When and if you conduct a Porter’s Five Forces analysis of an industry, it is a good idea to make a special effort to think about these sorts of things, to be sure you don’t miss important factors influencing the industry’s firms.

1.1. The Economics of Relationships

In the world of Strategic Management, Porter’s Five Forces is one of the pillars of analysis. Different strategy textbooks give variations on this specific theme, but in some form or another, the strategic analysis of an industry often starts with a filling-out of the specific details of these “forces.”

But while it is one thing to say, “Think about rivalry in the industry,” or “Gauge the relative bargaining positions of firms in the industry and their suppliers/customers,” it is another thing to know how to do this. And while Porter provides some tendencies in how these factors affect profitability—for instance, weaker suppliers tend to enhance profitability—these are only tendencies. When we have a better, more nuanced understanding of how suppliers are connected to the industry in question, we might learn—in particular cases, we will learn—that stronger suppliers can sometimes be better for firms in the industry.

Ultimately, a lot of this comes down to the relationships the firms within the industry have with one another and with their various suppliers and customers:

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5 A more detailed description of the Five Forces can be found in the Online Supplement, which is available online at https://micro4managers.stanford.edu.
This is perhaps most obvious when it comes to the relationships between firms and their customers, and between firms and their suppliers. One category of supplier, in particular, deserves emphasis: suppliers of labor inputs or, in other words, the employees of the firm. How a firm deals with its employees is all about relationships.

And the importance of relationships to rivalry is obvious.

Perhaps less obviously, relationships are important to entry barriers: A potential entrant to an industry must evaluate many things when contemplating entry, such as: How much of the market can I expect to capture?; how high will my fixed costs be—can I quickly gain enough share to achieve profitability?; do incumbent firms have a cost advantage, based on their experience and technological know-how? But other questions are: What is the relationship between firms already in the industry and suppliers of critical inputs to production? Do incumbent firms have critical suppliers locked up? What is the relationship between incumbent firms and customers? Will I be able to wean away enough customers to make this worth my while? If the good is retailed by others, will I be able to convince retailers to give my product shelf space? What are the relationships between the industry—and firms within the industry—and important legal and political entities that set the “rules” that the firms must follow? And, perhaps most important, what will be the reaction of incumbent firms if and when I enter? Will they “welcome me to the club” or “go to the mattresses” in an attempt to blockade my entry? In other words, what (can I anticipate) will be my relationship with them, if I enter?

And the relationships between firms in the industry and legal, legislative, and administrative organs of government, as well as with the industry’s relationships with the general society within which it is embedded, are all important.

Therefore, to carry out an intelligent analysis of the Five Forces, you need to understand the nature of economic relationships. But an understanding of the economic nature of relationships goes beyond industry analysis. For an individual firm (or other organization), the level of success it can achieve, both in absolute terms and relative to other firms with which it competes, is often hugely influenced by how well it manages its many relationships with other parties. So we begin this book with the economics of relationships.

1.2. Economics or Psychology?

Are relationships governed by economic forces or by psychology? The short answer is, Yes. Both economic and psychological considerations come into play. This fact has substantial consequences for what we do in this first part of the
1.2. Economics or Psychology?

book. Most readers, I expect, have had previous exposure to textbook economics. Most readers will think of economics as being all about the famous picture and slogan: *Equilibrium price is where supply equals demand*. We get to this picture and slogan in Part IV, but if you remember that stuff and, even more, if you think that supply equals demand is what economics is about, stop thinking that way, at least for now. Supply equals demand is largely about situations in which relationships play no part: It is about the economics of large numbers of otherwise anonymous buyers and sellers. That’s useful stuff in some contexts, but not when you are trying to understand the economic relationships that connect, say, United Airlines and Delta Airlines in their competition for passengers between Los Angeles and New York City, or between Toyota Motors and its network of suppliers, or between you and your next employer. In relationships, partners to the relationships are anything but anonymous. They have specific identities, known as such to one another. And how the parties act and react are influenced both by the economics of the situation and by its psychology.

In consequence, if you recall (fondly or not) the sharpness and precision of supply equals demand, where one price and only one price would clear markets, you must now be ready for a lot less sharpness and precision. And with that warning, let’s get started by learning a language for modeling and analyzing relationships.
Index

accounting, see also managerial (cost)
accounting

dot-com bubbles and, 282-83
durable assets, depreciation of, 280-83
national income accounting and, 283
accounting income versus economic profit, 317
adverse selection, 433, 448-50, 452
Akerlof, George, 453, 457n.5
Allais, M., 420
Allais Paradox, 418-20
Allis-Chalmers, see large turbine generator industry
Amazon.com versus Amazon.fr and price discrimination, 176
antitrust law
   in the European Community, 59, 65
   in the United States, 58, 65
as-if models of behavior, 224, 405
assembly-line production, 97-98
Aumann, Robert, 55n.4
automobile industry, 96-99
average cost
   marginal cost and, 140
   marginal cost derived from, 145-46
   marginal revenue and, 139
average-cost function
   defined, 138
   minimized at efficient scale, 140-43
average-revenue function defined, 138
   inverse demand and, 138
Ayers, Ian, 188n.5
backward induction, 25-30
believability, 28-30
iterated weak dominance and, 26-27
bang-for-the-buck principle
consumer utility maximization and, 227-31
cost minimization and, 255-27
efficient risk sharing and, 439-40
indifference curves and, 238
Baron, David, xi
Baron, James, 67n.9, 109n.5, 279n.7, 478n.9, 482n.10
barriers to entry (in Five Forces), 4
benchmarking in incentives, 476-77
Bertrand, J., 47
bilateral governance, 101
bilateral trade relationships, 66, see also reciprocity
bluffing in poker, 37
budget constraint, 226
Bulow, J., 300n.6, 396n.4
buying price of a gamble (versus selling price), 410-13
Casey, James, 75, 78
cap and trade programs, 388-90
   applied within a firm, 390-92
Capital Asset Pricing Model (CAPM), 435
Carfax, 446
certainty effect, 419
certainty equivalent
   buying and selling price and, 410
   defined, 409-10
   for negative-exponential, logarithmic, and power utility, 410
channels of distribution
   competitive retailers and, 211
   double marginalization and, 204
   franchise fees and, 205-07, 212-13
   multiple retailers and, 208-09
   simple model of, 200-07
   two-part tariffs and, 205-07, 212-13
cheap-talk, 73, 78-80
credibility and, 78-80
Intel and the 086 chip and, 71, 74-75
Kodak, Polaroid, and instant photography, 71-72, 80-81
chicken game, 32-33
Chrysler bankruptcy in 2009, 199
Coase, Ronald, 381

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Cobb–Douglas production function, 247, 250, 255-56, 264

collusion in oligopolies, 58-66, see also large turbine generator industry

in air engines (General Electric, Pratt & Whitney, and Rolls Royce), 60-61
antitrust laws, 64-65
in civilian airframes (Boeing versus Airbus), 60
market segmentation and, 63-64
OPEC and, 60, 61-62
the public interest and, 64-66
in “respectable” newspapers in the United Kingdom, 60

Common Agricultural Policy (of the EC), 367

competitive firm, 124, see also price-taking firms
competitive fringe, 62
shale-oil producers in the crude-oil industry, 327-29

competitive-market equilibrium, see supply equals demand
complementary products (in Five Forces), 4
complete and perfect information, 25n.5, 27

congestion externalities, 378
Consolidated Edison of New York, see large turbine generator industry
constant elasticity demand functions, 164n.2
constant-sum games, 14
constrained maximization, 135-38, see also bang-for-the-buck principle
consumer choice, see bang-for-the-buck principle; utility maximization
consumer surplus, 335, 339-42
cost minimization
bang-for-the-buck principle, 255-57
calculus and, 255
defined, 254
for fixed-coefficient technologies, 257-258
graphical solution, 259-60
inputs without prices and, 260-61
linear programming and, 266
marginal physical product and, 266
price discrimination and, 179-80, 191-92
returns to scale and, 258
rising marginal cost and, 258
Cournot, A., 47

credibility, 72-81
cheap talk and, 78-80
meaning in English, 73
threat game and, 72-73
trust game and, 73
tying everyone’s hands, including your own, 78

tying your own hands 74-78
Crosby, Philip, 267, 287-88
customer power (in Five Forces), 4
deadweight cost (or loss)
from market power, 344-45
from mis-set limits or fees when regulating pollution, 387-88
price ceilings and, 364-65
price floors and, 366-67
from taxes, 358, 360
Del Grande Dealership Group (auto dealerships), 197
demand equals supply, see supply equals demand
demand function
defined, 123
facing one firm, 123-24
for individual consumers, 239-40
industry-wide, 294
reservation demand and, 339-40
Department of Justice (Anti-trust Division), see large turbine generator industry
depreciation in income statements, 280-83
Disneyland and price discrimination, 169, 182-85
disparate impact, 190
dominance analysis, 20
believability of, 22-23
iterated, 21-22
Nash equilibrium and, 40
weak, 24-25
double marginalization, 204
durable assets (in production), 278-83
accounting depreciation of, 280-83
dynamic random access memory chips (DRAMs), 284

dynamics
in incentives, 478-79
competitive equilibrium responses to change, 314-16, 317-20, 323-26

economic profit versus accounting income, 317

economic role of firms, 110-15
focus for reputation stake, 113-14
limited liability and tax considerations, 112-13
management challenges and, 114-15
nexus of many bilateral transactions, 112
role creation, 114
unified governance, 111-12

economics of relationships
Porter’s Five Forces and, 6
summary of, 117-20

Efficiency, \( x_i \), see also invisible hand; total surplus
allocative versus dynamic, 347-48
competitive markets and, 342-45
equity versus, 346-47
externalities and, 379-80
innovation and, 347-48, 393
price-setting firms and, 344-45
profit maximization and, 344, 348-49
self-interest and, 348
surplus maximization as, 342-44
taxes and, 358, 360
transaction costs and, 348

efficient risk sharing, 437-40
  bang-for-the-buck principle and, 439-40
  with one risk-neutral party, 438-39

efficient scale (of production)
in competitive market equilibrium, 317-20, 322
computation of, 142-43
defined, 140, 142
profit-maximization and, 142-44
elastic demand defined, 162
elasticities in general, 169-70
elasticity of demand
computed with calculus, 157-58
computed with discrete changes, 156-57
defined, 156
inverse demand and, 158-59
by groups and in aggregate, 166-68
mark-ups and, 162-64
price, marginal revenue, and, 160-62
elasticity of supply defined, 295

Electric Workers union, see large turbine generator industry
Ellsberg, Daniel, 420
Ellsberg Paradox, 420-21
employment relationships, governance in, 107-09
equilibrium, \( x, \) see also supply equals demand; Nash equilibrium; adverse selection
equity, \( x_i \),
  versus efficiency, 346-47
government intervention and, 370-71
Erickson, M., 113n.6

ethical behavior and transaction costs, 115-17
European Community
antitrust policies, 59, 65
Common Agricultural Policy, 367

expected-utility model
Allais paradox for, 418-20
ambiguity aversion and, 421
behaviors it captures, 413-18
behaviors it misses, 418-23
certainty effect, 419
certainty equivalents, 409-10
comparison with (basic) utility-maximization model, 404
defined, 401-03
descriptive usage, 405
Ellsberg paradox for, 420-21
framing effects, 421-22
interval-scale property, 407-08
normative usage, 405
risk aversion and, 413-14
Savage model, 400n.1, 403n.3
securitization to spread risk and 430-32
small probability effect, 419
with states of the world, 403
subjective probabilities and, 403
expected-utility model (continued)
utility given by formula, 406
utility given graphically, 406
vanishing risk aversion for small stakes, 415
von Neumann–Morgenstern model, 400n.1, 403n.3
zero illusion, 422-23
experience curve, 283-86
extensive-form games, 14-18
backward induction for, 25-30
complete and perfect information, 25n.5, 27
information sets and, 15-16
moves by nature in, 16-18
Nash equilibria in, 40-41
strategies in, 18-20
externalities
cap and trade programs, 388-90
Coase Theorem and, 380-81
collective action and, 381
commons problems, 378
congestion, 378
efficiency and, 379-80
market power, 379
network and standards, 377
within organizations, 390-92
pollution, 382-90
positive and negative, 372-73
public goods, 378-79
social norms and, 380

family business, 75
firms with market power, see price-setting firms
first-degree price discrimination, 214-15, 240-41
Five Forces of Porter, 3-4
economics of relationships and, 6
flexibility in production processes, 251-54
folk theorem, 54-58
impact of noise, 57-58
required conditions for, 56-57
focal points, 35
noise and, 57-58
Ford, Henry, and the Ford Motor Company
assembly-line production and, 96-98, 106
vertical integration and, 97-98
framing effects, 224-25, 407n.5, 421-22, see also zero illusion
franchise fees (to defeat double marginalization), 205-07, 212-13
franchised dealerships
in automobile industry, 196-99
legal protection for, 213-14
Freedonian steel example (think margins, not averages), 123, 129-32
Friedman, Milton, 267, 287-88
frictions in changing production routines, 269-78
gambles, 400
game theory, see dominance analysis; extensive-form games; Nash equilibrium; noncooperative game theory; strategic-form games
GATT (General Agreement on Tariffs and Trade), 66
General Electric Corporation, see large turbine generator industry
General Motors
bankruptcy in 2009, 199
dealership network, 198
support for franchised dealerships, 214
truck coupons, xii, 300-03
Generally Accepted Accounting Procedures (GAAP), 149, 282
Gibbons, Robert, 43
“good” taxes, 258
Google’s advertising advice, 154-55
grim strategy, 53-54
Hall, Brian, 470n.2
Hanlon, M., 113n.6
Heinlein, Robert, 287n.8
hidden action, see moral hazard
hidden information
pooling equilibrium, 450, 458
signaling or separating equilibrium, 450-52, 456-58
various contexts of, 452

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<table>
<thead>
<tr>
<th>Term</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>heirarchical governance</td>
<td>101</td>
</tr>
<tr>
<td>high-fructose corn syrup industry</td>
<td>326-27</td>
</tr>
<tr>
<td>hold-up</td>
<td>66, 103-05, 213-14, see also credibility</td>
</tr>
<tr>
<td>Intel and the 086 chip</td>
<td>71, 74-75</td>
</tr>
<tr>
<td>horizontal summing</td>
<td></td>
</tr>
<tr>
<td>in demand function</td>
<td>167</td>
</tr>
<tr>
<td>in supply function</td>
<td>294</td>
</tr>
<tr>
<td>IBM, 75</td>
<td></td>
</tr>
<tr>
<td>incentives</td>
<td></td>
</tr>
<tr>
<td>benchmarking and tournaments</td>
<td>476-77</td>
</tr>
<tr>
<td>complications and elaborations</td>
<td>475-83</td>
</tr>
<tr>
<td>dynamics</td>
<td>478-79</td>
</tr>
<tr>
<td>multitasking</td>
<td>479-80</td>
</tr>
<tr>
<td>psychological considerations</td>
<td>482-83</td>
</tr>
<tr>
<td>ratchet effect</td>
<td>479</td>
</tr>
<tr>
<td>screening effect</td>
<td>481-82</td>
</tr>
<tr>
<td>subjective evaluation ex post</td>
<td>480-81</td>
</tr>
<tr>
<td>team-based</td>
<td>477-78</td>
</tr>
<tr>
<td>incomplete contracts</td>
<td></td>
</tr>
<tr>
<td>(in transaction-cost economics)</td>
<td>100, 106</td>
</tr>
<tr>
<td>indifference curve diagrams</td>
<td>235-37</td>
</tr>
<tr>
<td>consumer choice and</td>
<td>237-38</td>
</tr>
<tr>
<td>bang for the buck and</td>
<td>238</td>
</tr>
<tr>
<td>inelastic demand and profit maximization</td>
<td>162</td>
</tr>
<tr>
<td>inelastic demand defined</td>
<td>162</td>
</tr>
<tr>
<td>information</td>
<td></td>
</tr>
<tr>
<td>innovation</td>
<td></td>
</tr>
<tr>
<td>and efficiency</td>
<td>347-8</td>
</tr>
<tr>
<td>freely available</td>
<td>453-54</td>
</tr>
<tr>
<td>legally mandated</td>
<td>454</td>
</tr>
<tr>
<td>as a prospective positive externality</td>
<td>393</td>
</tr>
<tr>
<td>provided voluntarily</td>
<td>455-56</td>
</tr>
<tr>
<td>information sets</td>
<td>15-16</td>
</tr>
<tr>
<td>Intel Corporation and the 086 chip</td>
<td>71, 74-75</td>
</tr>
<tr>
<td>International Accounting Standards Board</td>
<td>282</td>
</tr>
<tr>
<td>(IASB)</td>
<td></td>
</tr>
<tr>
<td>inverse demand function</td>
<td></td>
</tr>
<tr>
<td>defined</td>
<td>125-26</td>
</tr>
<tr>
<td>elasticity derived from</td>
<td>158-59</td>
</tr>
<tr>
<td>equals average revenue</td>
<td>126</td>
</tr>
<tr>
<td>total and marginal revenue derived</td>
<td>127</td>
</tr>
<tr>
<td>invisible hand</td>
<td>334-40</td>
</tr>
<tr>
<td>role of prices in</td>
<td>334</td>
</tr>
<tr>
<td>isoquant diagrams</td>
<td>250-51</td>
</tr>
<tr>
<td>cost-minimization on</td>
<td>259-60</td>
</tr>
<tr>
<td>iterated dominance</td>
<td>21-22</td>
</tr>
<tr>
<td>Jensen, Robert</td>
<td>298</td>
</tr>
<tr>
<td>Jensen’s inequality (and risk aversion)</td>
<td>414n.7</td>
</tr>
<tr>
<td>Johnson Controls and Toyota</td>
<td>105-07, 113-14</td>
</tr>
<tr>
<td>Kahnemann, D.</td>
<td>418-20, 421</td>
</tr>
<tr>
<td>kanban</td>
<td>98</td>
</tr>
<tr>
<td>Kerala fish market</td>
<td>298-99</td>
</tr>
<tr>
<td>know-how in production</td>
<td>283-88, see also experience curve; production functions; total quality management</td>
</tr>
<tr>
<td>Kodak, Polaroid, and instant photograph</td>
<td>71-72, 80-81</td>
</tr>
<tr>
<td>labor unions, impact on productivity and</td>
<td>66-667</td>
</tr>
<tr>
<td>large turbine generator industry</td>
<td></td>
</tr>
<tr>
<td>collusion based on phases of the moon</td>
<td>48-50, 58</td>
</tr>
<tr>
<td>description and history</td>
<td>48-50</td>
</tr>
<tr>
<td>five-forces analysis of</td>
<td>48</td>
</tr>
<tr>
<td>post phases-of-the-moon period</td>
<td>49</td>
</tr>
<tr>
<td>Lazear, Edward</td>
<td>470n.2</td>
</tr>
<tr>
<td>Lincoln Electric Company</td>
<td>473n.4</td>
</tr>
<tr>
<td>LoJack</td>
<td>395-96</td>
</tr>
<tr>
<td>lotteries</td>
<td>400</td>
</tr>
<tr>
<td>Lucas Group (auto dealerships)</td>
<td>197</td>
</tr>
<tr>
<td>Madigan, Carleen</td>
<td>470n.2</td>
</tr>
<tr>
<td>managerial (cost) accounting</td>
<td>146-49</td>
</tr>
<tr>
<td>average cost and</td>
<td>140-42</td>
</tr>
<tr>
<td>cost allocation and</td>
<td>140-42, 148</td>
</tr>
<tr>
<td>discrete (incremental) margins ant</td>
<td>146-47</td>
</tr>
<tr>
<td>reasons for doing</td>
<td>148-9</td>
</tr>
<tr>
<td>technology and</td>
<td>258</td>
</tr>
<tr>
<td>transfer pricing for externalities</td>
<td>390-92</td>
</tr>
<tr>
<td>transfer pricing for tax purposes</td>
<td>148</td>
</tr>
<tr>
<td>marginal cost</td>
<td></td>
</tr>
<tr>
<td>average cost and</td>
<td>140-42</td>
</tr>
<tr>
<td>defined</td>
<td>126</td>
</tr>
<tr>
<td>technology and</td>
<td>258</td>
</tr>
</tbody>
</table>

For general queries contact webmaster@press.princeton.edu.
marginal physical product, 255
minimizing total cost with, 255-57
marginal rate of substitution, 252-53
marginal revenue
average revenue and, 139
defined, 126
marginal-cost function defined, 126
marginal-revenue function defined, 126
marginal values (rates of change) and maximization, 127
mark-ups
defined, 155
elasticity of demand and, 162-64
market for lemons, 453-461
market segmentation strategies (and collusion), 63-64
marginal cost equals marginal revenue (MC = MR), 126
market power, see price-setting firms
externalities caused by, 379
Maydew, E., 113n.6
microeconomics
definitions of, ix, x
efficiency and, xi
equilibrium and, x
equity and, xi
models and, xi
purposeful behavior and, x
Mike Harvey Group (auto dealerships), 197
minimum-wage legislation, 368
Ministry of International Trade and Industry (Japan), 370
mixed strategies, 37-40
relevance for managers, 39
modeling uncertainty
with objective probabilities, 400
with states of the world, 400-01
models of games, 11
monopolistic competition, 330
monopsony, 366-67
Montgomery, Cynthia, 1
moral hazard, 434
fundamental trade-off in, 469, 472, 474-75
incentives and, 474-75
in various contexts, 469
Morgenstern, O., 47
moves by nature, 16-18
multi-product firms
cost allocation and, 149
maximizing profit for, 132-35
multitasking (incentives), 479-80
multivariate optimization, 132-35

Nader, Ralph, 300
Nash equilibrium, 30-41
definition, 30
dominance and, 40
in extensive-form games, 40-41
meaning, 31-35
mixed strategies and, 37-40
use in analysis, 35-37
National Automobile Dealers Association, 197
National Highway Traffic Safety Administration (NHTSA), 300
natural monopoly, 309-10
natural resource extraction, 286
negative exponential utility, 406, 411-13, 417
network and standards externalities, 377
New York Stock Exchange specialist system, 297
Nobel Prize in Economics (Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel)
to Akerlof, George, 453n.1, 457n.5
to Robert, Aumann, 55n.4
to Coase, Ronald, 381n.2
to Spence, A. Michael, 457n.5
to Stiglitz, Joseph, 457n.5
to Williamson, Oliver, 99n.1
noncooperative game theory, see also dominance analysis; Nash equilibrium
books about, 43
extensive-form games, 14-18
extensive-form strategies, 18-20
information sets, 15-16
mixed-strategies and, 37-40
models of games, 11
moves by nature, 16-18
roadmap to, 8
strategic-form games, 12-14
strategy profile, 12

For general queries contact webmaster@press.princeton.edu.
Index

noncooperative game theory (continued)
  theory or language, 41

oil tanker shipping, 278n.6
OPEC, explicit collusion within, 59, 60, 61-62
own-price elasticity, see elasticity of demand

Pacific Gas and Electric, 48
Pareto efficiency, 346n.6
Parkin, Michael, 127
payoffs in games, 11, 23-24
peer pressure, 67-68
perfectly competitive firms, see price-taking firms
piecework compensation, 470-74
  Lincoln Electric Company, 473n.4
players in games, 11
poker, bluffing in, 37
Polaroid, Kodak, and instant photography, 71-72, 80-81
pollution, regulation of, 382-90
  cap and trade programs for, 388-90
pooling equilibrium, 450
Porsche and franchised dealerships, 197, 199, 209-12
Porter, Michael, 1
  Five Forces, 3-4
Pratt and Whiney versus Rolls Royce, 60-61, 77-78
price ceilings
  black markets and, 364-65
  deadweight cost from, 364-65
  firms with market power and, 362-64
  price-taking firms and, 364-66
price discrimination
  ability to sustain, 187-88
  cost based, 186-87
  couponing and, 179-80, 191-92
  definition of, 176
  degrees of, 186
  endogenous, in haggling, 189n.6
  essential services and, 186-87
  ethics of, 188-89
  first-degree in B2B, 214-15
  first-degree for consumers 240-41
  limits to, 187-88
  in new car sales, 188-89
  rationale for, 177-79
price-discrimination methods
  bundling, 183
  by demographic group, 180
  by differing terms and conditions, 181
  experience goods and, 185
  by differing terms and conditions, 181
  price elasticity, see elasticity of demand
  price floors, 366-68
price-setting firms, see also price discrimination; price-discrimination methods
  average cost versus marginal cost, 140-42
  average revenue versus marginal revenue, 138-39
  basic model of, 123-27
  double marginalization and, 203
  channels of distribution and, 196-213
  deadweight costs of, 344-45
  elasticity of demand, price, and marginal revenue, 160-62
  externalities caused by, 379
  inefficiencies due to, 344-45
  inelastic demand and, 162
  knowledge of demand and, 166
  marginal cost equals marginal revenue and, 126
  mark-up pricing and 155-56, 162-66
  multiproduct firms, 132-25, 149
  price ceilings and, 362-64
  profit maximization and, 124-25, 348-49
  subsidies for, 362
  taxes imposed on, 359-61
price-taking firms
  defined, 124
  entry and exit decisions, 316-18
  sunk costs and, 323-26
  supply decisions of, 306-10
  see also supply equals demand
Prisoners’ Dilemma game, 23-24
  repeated, and the folk theorem 50-54
Procter & Gamble (reputation), 87
producer surplus, 335-38
production functions
  cost minimization and, 254-60
  defined, 247

For general queries contact webmaster@press.princeton.edu.
production functions (continued)
experience curve technologies and, 283-85
fixed coefficients and, 252-54
frictions and different runs, 274-77
isoquant diagrams for, 250-51
know-how and, 283-88
marginal rate of substitution in, 252-53
returns to scale in, 249-50
rising marginal cost and, 258
total quality management and, 286-88
profit margin
defined, 142-43
maximizing profit margin versus maximizing profit, 142-43
profit maximization
basic model of, 123-24
efficiency and, 344, 348-49
efficient scale and, 142-44
in multiperiod models, 268-9
normative case for, 348-49
realism of, 125
profit-margin maximization versus, 143-44
shareholders’ interests and, 349
see also price-setting firms; price-taking firms
promise game, see trust game
prospects, 400
psychology
economics of relationships and, 6-7
incentives based on, 482-83
public goods, 378-79
purposeful behavior, x
“Quality is Free,” 267, 287-88
quotas, 368-70
tariffs versus, 369
rice import quotas, xiii, 368-70, 373
Voluntary Export Restraints, 370
ratchet effect, 479
realtors and collusion, 69-70
reciprocity, 50-58
Reiss, Peter, 197n.3
rents and quasi-rents, 321-22
conditions that promote/hinder it, 56-57
the folk theorem and, 50-58
repeated games (and the folk theorem), 50-56
with a sequence of partners, 84-85
reputation
ambiguity about, 91
credibility and, 85
defined, 82
economic role of firms and, 113-14
fragility of, 92
inertia in, 92-93
instrumental, 82
meaning in English, 82
multiple constituencies and, 92
noise in, 89-91
of Procter & Gamble, 87
public accounting firms and, 89-90
simultaneous play and, 88-89
for toughness, 85-87
of Toyota (with suppliers), 88-89, 105-07
for trustworthiness, 82-85
returns to scale, 249-50
total cost and, 258
rice import quotas, xiii
risk aversion, 413-14
constant risk aversion, 417
decreasing in wealth, 416-17
irrationality of, 417-18
vanishing for vanishing stakes, 415
see also expected-utility model
rivalry (in the Five Forces), 4
rock, paper, scissors, 37
Rolls-Royce versus Pratt and Whitney, 60-61, 77-78
runs (short run, etc.), 270-78
equilibria in, 314-20
Safelite Glass, 470-74
Samuelson, Paul A., ix
Saudi Arabia and shale-oil producers, 62n.8, 327-29
Savage model, 400n.1, 403n.3
Scholes, M., 113n.6
screening, 450-52, 456-58
via incentive schemes, 481-81
Index

securitization to share/spread risk, 430-32
capital asset pricing model (CAPM) and, 435
correlations and, 434-35
great recession and 435-37
reasons it fails, 432-34
separating equilibria, 450-52
selling price of a gamble (versus buying price), 410-13, see also certainty equivalent
shale-oil producers and Saudi Arabia, 62n.8, 327-29
Sherlock Holmes (and the dog that didn’t bark), 16n.2
Sherman Antitrust Act, 49, 59n.7
Shevlin, T., 113n.6
signaling, 450-52, 456-58
Sloan, Alfred P., 198
small-probability effect, 419
Snyder, Rick, governor of Michigan, 197, 199-200
social norms and externalities, 380
Spence, A. Michael, 357n.3
strategic-form games
constant-sum games, 14
defined, 12-14
dominance and, 20-25
from extensive-form games, 18-20
mixed strategies and, 37-40
Nash equilibria and, 30-37
zero-sum games 14
states of the world, 400-01
strategy profile, 12
subjective evaluation ex post, 480-81
substitute products (in the Five Forces), 4
sink costs in entry and exit, 323-26
sink-cost investments, 102, see also hold-up
supplier power (in the Five Forces), 4
supply decisions of price-taking firms, 206-10
supply elasticity, 295
perfectly elastic supply, 295
perfectly inelastic supply, 295
supply equals demand, 293, 295-96
competitive firms and, 310-14
conditions for, 296
dynamic response to changes, 314-16, 317-20, 323-26
economic profits, rents, and quasi-rents in, 321-22
efficient scale and, 318, 322
flat industry supply and, 318-19
free entry and, 316-21
General Motors truck coupons and, 300-03
Kerala fish market and, 298-99
minimum average cost and, 318-19
picture of, 293
role of market makers in, 296-97
short- and intermediate-run dynamics and, 314-16
sunk costs and, 323-26
supply function, 293-95
Tadelis, Steven, 43
tariffs, 293-95
quotas versus, 369
tax efficiency (and “good” taxes), 358
taxes, 353-61
burden on consumers versus firms, 357
competitive industry and, 354-58
deadweight cost of, 358, 360
elasticities, 356-57, 361
imposed on price-setting firm, 359-61
progressive and regressive, 359
shifting elasticities over time, 359
team-based incentives, 477-78
Teamsters Union, 75
technology, models of, see production functions
Tesla and franchised dealerships, 196-97, 199-200, 209-12
“There are no free lunches,” 268, 287-88
threat game, 72-73
reputation and credibility in, 85-87
tit-for-tat strategy, 53-54
total quality management, 267, 286-88
total surplus, 342
with externalities, 379-80
firms with market power and, 344-45
government share in, 345
invisible hand and, 334-40
maximized in competitive markets, 342-45

For general queries contact webmaster@press.princeton.edu.
total-revenue function defined, 126
tournament incentives, 476-77
Toyota
  relationship with suppliers, 88-89, 105-07, 113-14
  vertical integration and, 98-99
Toyota Production System, 98-99, 286-87
transaction cost economics, 99-102
  employment transactions and, 107-09
  ethical behavior and, 115-17
  governance in, 101
  hold-ups and, 103-05
  incomplete contracts and, 100, 106
Oliver Williamson, 99n.1
trilateral governance, 101
trust game, 73
  reputation and credibility in, 82-85
Tversky, Amos, 418-20, 421

United Parcel Service, 75, 78
unraveling (separating) equilibria, 456n.2
utility maximization
  bang-for-the-buck analysis of, 227-28
  behavior precluded by, 223-24
  budget constraint in, 226
  comparison with expected-utility model, 404
  consumption bundles defined, 224
  indifference curves and, 235-38
  indifference in, 221
  individual demand functions and, 239-40
  maximization of utility in general, 219
  with money-left-over utility functions, 231-35
  utility functions defined, 219
vertical integration at Ford Motor versus at Toyota, 97-99
Volkswagen USA and Volkswagen–Audi dealership network, 197
Voluntary Export Restraints, 370
von Neumann, J., 47
von Neumann–Morgenstern expected-utility, 400n.1, 403n.3, see also expected-utility model
Von Stackelberg, H., 47
Watson, Joel, 43
weak dominance, 24-25
Westinghouse, see large turbine generator industry
  winner’s curse, 458-59
Williamson, Oliver, 99n.1
Wolfson, M., 113n.6
world class manufacturing, 286-87
WTO (World Trade Organization), 66
Xerox Corporation, xiii, 71
zero illusion, 422-23
zero-sum games, 14