

Chapter 1

“The Wretched Spirit of Monopoly”

Historically, monopoly has, with limited exceptions, been seen by economists as a bane of markets, one of the more prominent forms of so-called market failure. Across time, economists have equated the “evils” of monopoly with theft and taxation, given that monopoly can impair an economy’s vigor just as theft and taxation can. Unfortunately, countries have, either all too willingly, with malice or political intention, created and nurtured monopolies, or else inadvertently, from ignorance of monopolies’ economic consequences, allowed them to arise and persist.¹

In contemporary economics, monopoly is treated as a source of “inefficiency,” or “deadweight loss.” That is, monopoly forces a misallocation of resources, with too few resources being used in the monopolized industries and too many resources used to lesser advantage in other competitive markets.² The chief modern standard of comparison for assessing the welfare loss of monopoly is “perfect competition,” a hypothetical market structure, developed mainly for analytical purposes, in which all potential gains from trade are realized—all resources are allocated among alternative uses with “perfection” (by assumptions of the model).

At the same time, many economists as far back as Adam Smith have doubted that the economic damage done by monopolies could long endure without the protective arm of government heeding the monopolies’ political demands for market protections. The main change in economists’ overall appraisal of monopoly through history has been the growing formalization of the monopoly model that shows ever more clearly the economic harm monopolies cause, a point that can be seen with a review of the treatment of monopoly by classical economists (covered in this chapter) and their more contemporary neoclassical counterparts (covered in the following chapters).

In this book, our central goal is to undertake a critical and extensive (but not exhaustive) reexamination of contemporary monopoly theory, though not with

an eye toward dispensing with the theory altogether. We would be the first to argue that the monopoly model that economists widely employ has many good uses. However, we suggest that the model has been overused and abused, given that it has almost everywhere been employed to show that monopoly power—or the capacity of firms to affect market price and firm profits (or “monopoly rents”)—is *prima facie* evidence of a “market failure,” or a sign of “inefficiency” and consumer “welfare loss,” which amounts to the same thing. On the contrary, we suggest that there is much wisdom in a widely unappreciated position taken by Joseph Schumpeter (1883–1950) in his classic 1942 work *Capitalism, Socialism, and Democracy*, in which he observed, partly in an effort to explain why capitalism would not survive, that an economic system is necessarily an imperfect evolutionary process of “creative destruction,” which makes it ill-suited for ultimate appraisal by the static analysis of conventional economic theory.

Since we are dealing with a process whose every element takes considerable time in revealing its true features and ultimate effects, there is no point in appraising its performance of that process *ex visu* of a given point of time; we must judge its performance over time, as it unfolds through decades or centuries. A system—any system, economic or other—that at *every* point of time fully utilizes its possibilities to the best advantage may yet in the long run be inferior to a system that does so at *no* given point in time, because the latter’s failure to do so may be a condition for the level or speed of long-run performance. (1942, 83; emphasis in the original)

In taking a page from Schumpeter, we suggest that monopoly, or the prospect of monopoly, is an engine of creative production, which necessarily undergirds economic progress, in contrast to much ingrained wisdom that suggests that monopoly is a drag on economic progress. Take monopoly, and concomitant monopoly rents, out of a market economy—that is, convert all markets to ones of perfectly fluid (and perfectly efficient) competition, or some close approximation, eliminating all prospect of economically significant monopoly rents in the process—and the system will likely stagnate. Any short-run efficiency gains achieved by such a conversion, even if such were possible without massive disruption in economic relationships, would likely be swamped by the long-term losses from the absence of what Schumpeter considered the far more potent force of “creative destruction.”

In short, we suggest that market economies need some optimum level of monopoly presence to achieve maximum growth in consumer welfare over time. The concept of optimum monopoly, albeit ill-defined, could better direct policy-level discussions on copyrights, patents, and antitrust than the

current view that elevates “perfect competition” (or, again, some close approximation) and the intentional destruction of all monopoly vestiges as a societal goal of the highest order. “The only good monopoly is a dead one” is a quip, in other words, that contains a mountain of fallacies.

As will be seen, we extend our criticisms of current monopoly theory by showing that monopoly pricing can increase consumer surplus under specified market conditions (e.g., network effects) at the same time that it spawns the so-called deadweight loss (a concept that needs to be discarded in much economic analysis as irrelevant). Of course, our analysis leads inexorably to the conclusion that market entry barriers can be welfare enhancing, in spite of their giving rise to a deadweight loss, as described in conventional analysis.

We show that even when the conventional monopoly model is taken as the basis for analysis, the monopoly profits and deadweight loss of monopoly are not nearly so large as economists’ blackboard models indicate, simply because conventional analysis does not recognize that achievement of the monopoly objective of restricting sales to raise price and profits is a managerial problem of major proportions. It is a coordination problem, differing from the coordination problems faced by cartels of independent producers only in degree.

Moreover, conventional analysis in which a fully competitive market is somehow magically cartelized does not consider an obvious problem, that the individual producers who are brought under a cartel’s umbrella of market control can switch roles, from being independent entrepreneurs, or principals, to being employees (or bureaucrats), or rather agents, the net effect of which is to change dramatically their incentives to produce efficiently. This means that much monopoly “rent seeking” (or the pursuit of monopoly profits through government-backed restrictions) must be revised. If monopoly rents are reduced by so-called principal-agent problems in managing monopolies, then less rent seeking must be the consequence, which implies less inefficiency than conventional monopoly rent-seeking theory suggests.

In the conventional analysis of monopoly, consumers would never want to be subjected to monopoly pricing. They would pay higher prices as well as transfer a portion of their consumer surplus to the monopoly owners. We suggest this is only the case in static analysis, when the product is a given and when there is no interplay between the actual, or anticipated, consumption of the good and future consumer demand for the product over time. Indeed, we suggest that under some realistic market conditions, consumers would actually want to face the prospects of monopoly pricing at some future point in time, as such prospects can affect the monopolist’s pricing decisions between now and when the monopoly rents are actually extracted. This isn’t to say that consumers aren’t worse off from monopoly pricing. On the contrary, they are

when it occurs, but a producer's initial pricing policies that lead to the monopoly prices can more than compensate consumers for the costs they incur from the so-called future monopoly prices.

All of these points, understandably, lead to a need for a revamping of modern antitrust thinking that is heavily guided (and misguided) by the conventional microeconomic theory of monopoly under which so many legal scholars and judges have mistakenly equated market dominance with monopoly—monopoly as a problem that requires a government-imposed solution.³

Finally, we point out that the theory of monopoly on the buyer's side of the market—monopsony—is as defective as monopoly on the seller's side. For reasons we will explain, it is hard for us to imagine how a monopsony would ever be able to emerge in labor (or other input) markets without paying above what were, before the monopsony emerged, competitive wage rates. Hence, from the perspective of arguments marshaled in chapter 7 of this book, monopsony should more correctly be viewed as expanding labor's employment and income opportunities, not contracting them. In chapter 8, we expand on our discussion of problems with monopsony theory with a discussion of how the NCAA, an acclaimed monopsony of collegiate athletic (mainly football and basketball) talent, could be actually improving the welfare of those athletes whom other economic and legal scholars presume are being exploited. If this view is correct (or to the extent it is), any proposal that would force the NCAA to pay market wages for college and university athletes would have the exact opposite impact of the one intended.

To put these points in historical context, we begin in this chapter an examination of the monopoly views of key economists in history, starting with Adam Smith and going through Schumpeter. This review of monopoly thinking is intended to be indicative only of how economists' thinking on monopoly has evolved over time. It is not intended to be exhaustive of all positions taken by economists on monopoly. In the following chapter, we will present the contemporary monopoly model in some graphical detail with the purpose of laying the foundation for critiques of monopoly theory developed by Donald Dewey (1959) and John McGee (1971) on which we expand in a variety of ways in following chapters. In the main, however, our critique follows in the Schumpeterian tradition (Schumpeter 1942).

SMITH, BENTHAM, AND RICARDO ON THE “EVILS” OF MONOPOLY

The venerable Adam Smith (1723–90), the recognized founder of economics as a discipline, viewed monopoly not much differently than contemporary

economists now do, although, as might be expected, Smith was less exact in the way he chose to discuss the economic harm done by a monopoly. In his *Wealth of Nations*, he used the term *monopoly* to describe a range of market structures, with the critical feature being the capacity of a firm or firms within a protected industry to raise the selling price above the competitive—or “natural”—price. More specifically, he equated the grant of a monopoly with a trade secret that allowed the producer to control supply and, hence, price (Smith 1776, bk. 1, chap. 7).

By controlling supply—or “keeping the market under-stocked, by never fully supplying the effectual demand”—Smith reasoned that monopolists can “sell their commodities much above the natural price, and raise their emoluments, whether they consist in wages or profit, greatly above their natural rate” (1776; bk. 1, chap. 7, ¶ 26). On the one hand, the monopolist’s price “is upon every occasion the highest which can be squeezed out of buyers, or which, it is supposed, they will consent to give.” On the other, the “natural” or competitive price “is the lowest which the sellers can commonly afford to take, and at the same time continue in business” (bk. 1, chap. 7, ¶ 27).

To Smith, as well as to other early economists, the word *monopoly* was not exclusively used to characterize a single seller of a good or service protected by barriers to entry, as is often the case in modern discussions of monopoly. Rather, monopoly applied more loosely to any firm that was capable of elevating its price above cost and that could generate monopoly rent, or an income over and above what was required to keep the resources in their current employment. This meant that Smith used monopoly to describe any firm capable of restricting sales with the intent of raising its price, but it also applied to firms that were protected by, say, import restrictions and that, as a consequence, were able to elevate their prices above competitive levels, as well as expand their sales. (Our discussion of monopolies will follow Smith in this regard. We will talk about monopolies as being firms that have some control over price through control over market supply, even though they may not be the only seller in their market.)

Accordingly, Smith was concerned with the monopoly consequences of mercantilism, which gave rise to a host of trade restrictions designed (mistakenly) to build the nation’s economic well-being. The British Navigation Act of 1660 specified that “no merchandise shall be imported into the plantation but in English vessels, navigated by Englishmen, under the penalty of forfeiture” (Little 1886, ¶ 3693). Another law prohibited the importation of all European commodities into the colonies except in British ships manned by Englishmen. There were other times in which kings used patents and exclusive franchises as revenue sources. For example, Charles I, circa 1630, issued a patent on soap to

a “company of soap-makers” on the condition that the soap-makers pay him £10,000 and £8 per ton of soap they sold (¶ 3689). In the Act of 1672, New England producers were forbidden to compete with the English on the produce from Southern plantations. Moreover, American firms were forbidden to manufacture goods that would compete with English goods in foreign markets (¶ 3699).

Among monopoly’s many vagaries—which caused Smith to summarize them as the “wretched spirit of monopoly”—Smith cited how the creation of monopoly by, say, import restrictions oppresses the poor, and, at the same time, the oppression of the poor invariably gives rise to “the monopoly of the rich, who, by engrossing the whole trade to themselves, will be able to make very large profits” (1776, bk. 1, chap. 9, ¶ 15). He also noted how monopolies are “a great enemy to good management” because, protected as they are, monopolists don’t have to work as hard at improving, as a matter of market self-defense, their management ways in response to “free and universal competition” (1776, bk. 1, chap. 11, ¶ 14).

Moreover, whereas monopolies might well improve the profits of the protected industry, they necessarily undercut state tax revenue precisely because aggregate national income is diminished (1776, bk. 4, chap. 7, ¶ 143).⁴ And then there is the one flaw of every monopoly that Smith characterized as “fatal”: “The high rate of profit seems every where to destroy that parsimony which in other circumstances is natural to the character of the merchant. When profits are high that sober virtue seems to be superfluous and expensive luxury to suit better the affluence of his situation” (1776, bk. 4, chap. 7, ¶ 147). Because the protected “owners of great mercantile capitals” are often political and commercial leaders of communities and, hence, set examples for others by how they act, a monopoly can also cause the masses of workers to be less parsimonious than they would be otherwise.

Accumulation is thus prevented in the hands of all those who are naturally the most disposed to accumulate, and the funds destined for the maintenance of productive labour receive no augmentation from the revenue of those who ought naturally to augment them the most. The capital of the country, instead of increasing, gradually dwindles away, and the quantity of productive labour maintained in it grows every day less and less. (1776, bk. 4, chap. 7, ¶ 147)

Finally, Smith is well known for having written,

People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or

in some contrivance to raise prices. It is impossible indeed to prevent such meetings, by any law which either could be executed, or would be consistent with liberty and justice. But though the law cannot hinder people of the same trade from sometimes assembling together, it ought to do nothing to facilitate such assemblies; much less to render them necessary. (1776, bk. 1, chap. 10, ¶ 82)

Smith is also well known (and revered) for his emphasizing the value of markets freed of government interferences—aside for a short list of potential interferences, including certain goods, like roads, characterized as “public goods” in modern literature. What is not so widely appreciated is that Smith argued for public provision of cross-country roads in part because they would ease the flow of trade across local markets and thereby would make cartels more difficult to maintain.⁵

Because Smith presumed that privately organized cartels would be short lived, due to the forces of competition that would arise, his major concern in the *Wealth of Nations* was with monopolies that were either directly approved by the state or those that arose in the domestic economy because of government-imposed restrictions on international trade that gave the protected domestic firms a degree of monopoly pricing power (a concern we share in spite of our defense of monopolies that arise from unfettered market forces). Smith recognized that “country gentlemen and farmers” have a more difficult time than merchants and manufacturers in colluding against the general public. As a consequence, “they accordingly seem to have been the original inventors of those restraints upon the importation of foreign goods which secure to them the monopoly of the home-market” (1976, bk. 4, chap. 2, ¶ 21). The monopoly profits to be garnered with the trade restrictions are all the “encouragement” domestic firms need to press for the protection, which, in the process, distorts the allocation of resources, especially the employment of labor.⁶

In this regard, Smith seemed to understand economic tenets that, in modern times, form the basis of public choice economics, which uses economic theory—including monopoly theory—to understand governmental policy processes. Monopoly, in other words, was an important engine of interest group politics, or what has come to be called, following the work of twentieth-century economists Gordon Tullock (1967) and Anne Krueger (1974), rent seeking, the political search for monopoly profits from government-imposed market restrictions or other forms of government-provided largess with the added profits being the motivation, or what Smith called “encouragement.”

Ultimately, the problems of monopoly, according to Smith, are com-

pounded by government being made “subservient to the interest of monopoly” (1776, bk. 4, chap. 7, ¶ 190), and the restrictive laws, passed at the urging of monopoly-seeking interest groups, are “written in blood.”⁷ So what if the import taxes encouraged smuggling that, in turn, reduced government revenues from what they would have been had a lower import tax been imposed? Smith understood that tax revenues were not the point of the import restrictions; monopoly privileges were.⁸

Of course, protected industries would like nothing better than to have their domestic monopoly extended to markets in foreign countries, Smith mused. However, any government’s jurisdictional boundaries necessarily limit the geographical reach of any monopoly protection, which is why the protected industries have pressed for export subsidies that can be expected to have the same production and profit effects for the favored domestic firm or industry as the import restrictions. In Smith’s view, firms that benefited from export subsidies were no less monopolies than the firms that were favored with import restrictions. Both sets of favored firms received monopoly rents that were, in some sense, unearned and that gave rise to the misallocation of resources, as well as to all the other harms Smith noted that flowed from the presence of monopoly.⁹

Contrary to what might be deduced from reading about Smith’s hostility to market protections in general, he was not totally opposed to all monopolies under all circumstances. According to Jeremy Bentham (1748–1832), Smith once wrote (in a publication Bentham did not identify),

When a company of merchants undertake at their own risk and expence to establish a new trade, with some remote and barbarous nation, it may not be unreasonable to incorporate them into a joint-stock company, and to grant them, in case of their success, a monopoly of the trade for a certain number of years. It is the easiest and most natural way, in which the state can recompense them, for hazarding a dangerous and expensive experiment, of which the public is afterwards to reap the benefit. A temporary monopoly of this kind may be vindicated, upon the same principles, upon which a like monopoly of a new machine is granted to its inventor, and that of a new book to its author. (Bentham 1787, Letter 13, ¶ 38)

Bentham scolded Smith for being inconsistent, given that Smith had in other forums denounced all other monopolies. Bentham added, “Private respect must not stop me from embracing this occasion of giving a warning, which is so much needed by mankind. If so original and independent a spirit [as Adam Smith] has not been always able to save itself from being drawn aside by the fascination of sounds, into the paths of vulgar prejudice, how strict a watch ought not men of common mould to set over their judgments, to save them-

selves from being led astray by similar delusions?” (§ 39). Bentham suggested that Smith could use his logic for his monopoly exception to support usury laws, which Smith, Bentham noted, had opposed (§ 44).

David Ricardo (1772–1823) added to Smith’s view of monopoly in only marginal ways. In his *Principles of Political Economy*, Ricardo noted, like Smith, that the monopoly price “is at the very highest price at which the consumers are willing to purchase it,” but this monopoly price could change from time period to time period and product to product. However, that price, according to Ricardo, “is nowhere regulated by the cost of production” (1817, chap. 17, § 8). Ricardo’s main concern was elaborating on an argument pushed by Smith, Thomas Robert Malthus (1776–1834),¹⁰ and others, that private property in land was a source of monopoly, that the price of land is necessarily a monopoly price, and that the prices of crops—barley or wheat, for example—produced on the land contain monopoly rent that, if taxed away, would fall totally on the landlord, or so argued Ricardo: “If all rent were relinquished by landlords, I am of opinion, that the commodities produced on the land would be no cheaper, because there is always a portion of the same commodities produced on land, for which no rent is or can be paid, as the surplus produce is only sufficient to pay the profits of stock” (1817, chap. 20, § 12).

Ricardo corrected Smith, and others who adopted Smith’s position on trade restrictions as a source of monopoly rents, in one substantial way. He stressed that trade restrictions do not afford domestic producers the power to charge monopoly prices and to garner monopoly rents as Smith had maintained. This is because such restrictions do not cut out domestic competition, which could be intense. The “real evil” from such restrictions, Ricardo argued incisively, is not that the restrictions enable the supposed “monopolies” to charge more than the competitive price, but that the restrictions actually raise the “natural price” (meaning competitive, cost-based price) because they increase market inefficiency: “By increasing the cost of production, a portion of the labour of the country is less productively employed” (1817, n. 54).¹¹ Ricardo seemed to understand a point often overlooked in even modern treatments of monopoly, namely, that monopoly rents can be capitalized in the market value of tradable monopoly, rent-producing assets (e.g., land or franchise), the effect of which can be to hike implicit opportunity costs and to drop profits net of the value of tradable asset prices, returning rates of return on investments to competitive levels.

BASTIAT AND MARX ON MONOPOLY AS “PLUNDER”

French economist Frédéric Bastiat (1801–50) is renowned for his incisive satirical opposition to import restrictions, as in his “petition” to the French Cham-

ber of Deputies on behalf of his country's "Manufacturers of Candles, Tapers, Lanterns, Candlesticks, Street Lamps, Snuffers, and Extinguishers, and from the Producers of Tallow, Oil, Resin, Alcohol, and Generally of Everything Connected with Lighting." In his petition, he urged his fellow deputies to pass laws that would require people to block out the sun during the entire day for no higher purpose than to increase the demand for candles and everything else his supposed clients produced. Such laws would have essentially the same effects as all other laws designed to thwart the free flow of trade founded on cost advantages.¹²

Obviously, Bastiat had no more respect for monopolies, especially government-created ones, than did Smith and Ricardo. We will consider in some detail Bastiat's views on monopoly in chapter 10 (when we consider how writers have equated, wrongly, property rights with monopoly privileges). Here we can note that in various publications, Bastiat placed monopoly among a changing list of "evils of society," along with war, slavery, unethical practices, theocracy, colonialism, impostures, inequitable taxation and excesses of government, frauds of every kind, and privilege (1850, chap. 1, ¶ 32; chap. 8, ¶ 9; 1845, ser. 2, chap. 2, ¶ 12). Bastiat saw government-sanctioned "plunder" as a common denominator of his "evils": "Plunder not only *redistributes* wealth; it always, at the same time, *destroys* a part of it. War annihilates many values. Slavery paralyzes many capabilities. Theocracy diverts many energies toward childish or injurious ends. Monopoly too transfers wealth from one pocket to another, but much of it is lost in the process" (1845, ser. 2, chap. 1, ¶ 21).

When Bastiat wrote about monopoly, he was most concerned about the then widely expressed contentions that (1) private property gave the owners monopoly power and (2) "Liberty begets monopoly," along with "Oppression is born of freedom" (1850, chap. 1, ¶ 87). With regard to the latter, what he called a "socialistic pretext," Bastiat scoffed that the argument is "fatal" for human history because the claim implied that for people "to learn to choose is to learn to commit suicide" and then there would be no satisfactory governmental means of correction, given that government would have to call upon human beings who are, by the nature of the claims, fatally flawed.¹³ Bastiat maintained that the "laws of competition" would see to it that there is no "permanent monopoly," "since the product of their labor, by an inevitable dispensation of Providence, tends to become the common, gratuitous, and consequently equal heritage of all mankind" with the result "in mankind a basic tendency toward *equality*" (1850, chap. 16, ¶ 110). By this he seemed to mean that any temporary market advantage, owing to some unique ability, would dissolve with the emergence of competition from the spread of the advantage with duplication.¹⁴

With regard to the claim that private property affords owners monopoly privileges, Bastiat first quoted a number of prominent writers of his time, including Smith, Ricardo, Considerant, and Jean-Baptiste Say (1767–1832), as well as lesser known individuals, all of whom maintained that land is productive in and of itself, independent of what owners do to it, and hence gives rise to unearned returns, treated synonymously with monopoly profits and monopoly rents. According to pre-Bastiat scholars, when crops are sold, the workers get paid for the value they add to what is produced, but landowners are paid for what is rightly the contribution of the land, not the owner.¹⁵ No economic purpose was seen to be served by the payment to property, just as there is no positive societal economic purpose served by the rent of monopolists who are able to control market supply. Bastiat points out that any value contributed by the land, which is truly “gratuitous” (an adjective that seems to be synonymous with “unearned”) will be competed away: “Land as a means of production, in so far as it is the work of God, produces *utility*, and this utility is gratuitous; it is not within the owner’s power to charge for it. The land, as a means of production, in so far as the landowner has prepared it, worked on it, enclosed it, drained it, improved it, added other necessary implements to it, produces *value*, which represents human *services* made available, and this is the only thing he charges for. Either you must recognize the justice of this demand, or you must reject your own principle of *reciprocal services*” (1850, chap. 9, ¶ 111; emphasis in the original). Bastiat continues by arguing that the landowner receives a return only for the improvements he has made.¹⁶

With regard to the claim that scarcity of resources or goods affords their owners monopoly power, which is destructive of social welfare, Bastiat acknowledges that nature’s scarcity enables the resource and good owners to extract higher prices than otherwise. However, he dispenses with the argument by drawing a distinction between “natural monopoly” (that which emanates from nature) and “artificial monopoly” (that which is contrived by firms or government). Bastiat notes that “the favors bestowed by Nature do no harm to society. At the very most we could say that they bring to light an evil that already existed and can in no way be imputed to them. It is too bad, perhaps, that tokay wine is not as plentiful, and therefore not as cheap, as ordinary red wine. But this is not a social evil; it was imposed on us by Nature,” to which he adds, “Mankind would be childish indeed if it became upset, or if it rebelled, because there is only one Jenny Lind, one Clos-Vougeot, or one Regent [talented people of Bastiat’s era]” (1850, fn. 13).

For Bastiat, what should be of major concern is when people impose an artificial scarcity on themselves through governmental grants of monopoly privileges, which can only add to social and economic impoverishment, espe-

cially as monopoly privileges are widely extended to industry groups.¹⁷ When monopoly privileges become widespread, Bastiat saw a form of creeping socialism with ever more monopoly privileges, as well as other forms of government largesse—“education, employment, credit, assistance, at the people’s expense”—provided to the “masses.” The “masses” understandably justified their political press for government benefits by all the other extant government-based privileges and largesse. Although Bastiat never used the expression Prisoner’s Dilemma,¹⁸ he certainly saw that dilemma at work as the political process helped one group after another, with the end result being a loss for (practically) everyone: “But how the people, once they have won their battle, can imagine that they too can enter as a body into the ranks of the privileged, create monopolies for themselves and over themselves, extend abuses widely enough to provide for their livelihood; how they can fail to see that there is nobody below them to support these injustices, is one of the most amazing phenomena of this or any age” (1850, chap. 12, ¶ 28).

Karl Marx (1818–83) had much to say, of course, about how capitalism favored the capitalists over the workers, given that the capitalists got rich by extracting a “surplus value” from the productive contributions of labor. However, according to Marx, Malthus’s dreadful population theory was much to blame. People’s sexual proclivities would ensure a supply of labor that would press worker wages toward, if not exactly to, subsistence levels, except for short periods of time. Capitalists could take the differential between the market value of what the workers produced and what they were paid. Marx had little to say about monopoly per se.¹⁹ However, he shared Smith’s and Ricardo’s complaint that many firms were able to extract more than a competitive surplus value because they were often protected from competition.

Manufacturing was constantly protected in the domestic market by protective tariffs, in colonial markets by monopolies, and in foreign markets, to the maximum extent possible, by differential tariffs. The processing of domestically produced materials (wool and linen in England, silk in France) was favoured, the export of raw materials generated at home was prohibited (wool in England) and the [processing] of imported materials was either neglected or suppressed (cotton in England) . . . In general, manufacturing could not dispense with protection, because the slightest change occurring in other countries can cause it to lose markets and be ruined. (1845, 162–63)

Elsewhere, Marx chided the political parties in England for not having an adequate explanation for the “pauperism” of the masses. Each of the two dominant parties, Whigs and Tories, considered the other party the cause, with the

Whig Party pointing to the “large-scale ownership and the prohibitive legislation against the import of corn,” and the Tory Party claiming that the “entire evil lies in liberalism, in competition, in a factory system that has been carried too far,” points that allowed Marx to note that neither party understood that the source of poverty lies in politics in general and that the solution lies in “the reform of society” (1844, 100). In this regard, Marx shared with Bastiat a healthy disrespect for the conduct of politics.

MARSHALL ON THE “NET REVENUES” OF MONOPOLY

Alfred Marshall (1842–1924) is widely recognized for having formalized much of the economic theory of his time in his textbook, *Principles of Economics*, first published in 1890. In that work, he introduced the concepts of supply and demand curves, equilibrium, price-elasticity of demand, consumer surplus, and producer surplus. Moreover, he made full use of marginal analysis (which dates to the work of Stanley Jevons [1835–82], Leon Walras [1834–1910], and Carl Menger [1840–1921], the three economists generally credited with explaining prices with reference to *marginal* utility and, thus, founding the “marginal revolution”). Marshall explored market adjustments under three periods: the “market period,” the amount of time in which the amount of a good cannot be varied; the “short period,” or the amount of time in which labor and other inputs can be changed but capital cannot; and the “long period,” or the amount of time in which all resources, capital included, can be varied.²⁰

With respect to monopoly, Marshall accepted the general view that a monopoly was any firm able to “fix an artificial monopoly price; that is, a price determined with little direct reference to cost of production, but chiefly by a consideration of what the market will bear” (1890, bk. 5, chap. 1, ¶ 17). He then set about describing in some detail, with the aid of graphs (relegated to footnotes), how a monopolist, which disregards the interests of society, including consumers, would choose its price-output combination in order to maximize “net revenues,” or monopoly profits, which he defined to be revenues minus all explicit and implicit costs, including risk cost, and “normal profits.” This means that he defined monopoly profit in much the same way it is defined in contemporary economics.

Marshall also pointed out that the monopolist’s profit-maximizing price would be left unaffected by a change in the firm’s fixed costs or by a tax applied solely to “net revenues.”²¹ Of course, a change in variable costs or a tax applied to total revenue (or the “amount produced”) or to book profit (not “net revenue”) would cause the monopolist to reduce its output and raise its price.²²

Marshall recognized that the monopolist’s pricing could be tempered by a

number of factors, not the least of which is that the monopolist might be duty-bound to be concerned about the welfare of consumers.²³ However, it might also be concerned with how its pricing decision could affect the entry of competitors, which led him to suggest an early, albeit brief, form of the more contemporary theory of “limit pricing,” that is, “of a monopoly limited by the consideration that a very high price would bring rival producers into the field” (1890, bk. 4, chap. 11, ¶ 16)—a theory of monopoly pricing brought back into vogue among economists in the 1940s and 1950s by Joe Bain (1949, 1956) and Franco Modigliani (1958) in the form of “entry forestalling prices.”²⁴ However, Marshall also suggested that the monopolist might temper its *current* price demands in order to develop its market and the *future* demand for its product that would, at that time, allow the monopolist to charge a higher price.

But, in fact, even if he [the monopolist] does not concern himself with the interests of the consumers, he is likely to reflect that the demand for a thing depends in a great measure on people’s familiarity with it; and that if he can increase his sales by taking a price a little below that which would afford him the maximum net revenue, the increased use of his commodity will before long recoup him for his present loss. The lower the price of gas, the more likely people are to have it laid on to their houses; and when once it is there, they are likely to go on making some use of it, even though a rival, such as electricity or mineral oil, may be competing closely with it. The case is stronger when a railway company has a practical monopoly of the transport of persons and goods to a sea-port, or to a suburban district which is as yet but partly built over; the railway company may then find it worth while, as a matter of business, to levy charges much below those which would afford the maximum net revenue, in order to get merchants into the habit of using the port, to encourage the inhabitants of the port to develop their docks and warehouses; or to assist speculative builders in the new suburb to build houses cheaply and to fill them quickly with tenants, thus giving to the suburb an air of early prosperity which goes far towards insuring its permanent success. This sacrifice by a monopolist of part of his present gains in order to develop future business differs in extent rather than kind from the sacrifices which a young firm commonly makes in order to establish a connection. (1890, bk. 5, chap. 14, ¶ 20)

In making these observations about the interconnectedness of demand over time, Marshall was anticipating more involved theories that came nearly a century later and will be considered in following chapters in this volume: the theories of experience goods (Nelson 1970), rational addition (Becker and Murphy 1988), lagged demand (Lee and Kreutzer 1982), and network effects (Arthur 1996). However, Marshall obviously failed to consider in his textbook that consumers might anticipate how current pricing could affect the future

monopoly power of the firm achieved from lowering its current prices and, therefore, how consumers' current purchases might be tempered without some assurance by the firm that it would not act like a monopolist in the future.

Modern refinements on monopoly theory in the form of imperfectly competitive or monopolistically competitive market structures developed by Edward Chamberlin (1933) and Joan Robinson (1933) have not given rise to a fundamentally different treatment of the way firms facing a downward sloping demand can curb production and give rise to a misallocation of resources. The difference in the distortion is a matter of degree, not of kind. The principal difference is that imperfect monopolies cannot count on earning monopoly rents in the long run. Still, such firms have excess capacities. The issue of whether the product variations spawned under imperfect monopoly market structures compensate, or more than compensate, for the supposed resource misallocation is left as a question that economists cannot answer, and should not pretend that they can (or so conventional, contemporary economic thinking holds).

SCHUMPETER ON THE VITAL ROLE OF THE “MONOPOLOID SPECIE”

When Joseph Schumpeter said that any economic system that is fully efficient at every point in time will likely be inferior to a system that is efficient at no point in time, he was dramatically parting ways with what had, through time, developed into the conventional view of monopoly, or what he tagged as the “monopoloid species”²⁵ (1942, 106): Any level of monopoly (or any market structure “less perfect” than perfect competition) should be the object of economists' scorn (with the degree of scorn related to a firm's “monopoly power,” or ability to hike prices above marginal cost). In Schumpeter's view, “monopoly had become the father of almost all [market and societal] abuses—in fact it became his [the economist's] pet bogey” and had become “almost synonymous with any large-scale business” (1942, 100). He noted that Adam Smith had “frowned” on monopolies with “awful dignity” (1942, 100). By using perfect competition as the standard of market efficiency, or cost-based competitive pricing, Schumpeter argued that “literally anyone is a monopolist that sells anything not in every respect, and wrapping and location and service included, exactly like what other people sell; every grocer, or every haberdasher, or every seller of ‘Good Humor’ on a road that is not simply lined with sellers of the same brand of ice cream” (1942, 99). To him, “pure competition” was no less than a “hallowed ideal,” and its use by economists to divine policy positions (especially relating to antitrust policy) was “futile” (1949, 358). Because of virtually all economists' myopic focus on perfect competition, Schumpeter con-

cluded that an economist could be “a very good theorist and yet talk absolute nonsense whenever confronted with the task of diagnosing a concrete historical pattern as a whole” (1942, 83, fn. 3). Edward Mason reports that Schumpeter once confided that “he [Schumpeter] was anxious to clear existing work out of the way in order to undertake a study of the question whether anything could be said about the ‘monopoly problem’ that was anything other than ‘sheer ideology’” (Mason 1951, 141), a study on which, by the time of Schumpeter’s death, he had already drawn strong conclusions.²⁶

Schumpeter reasoned that economists’ static models of markets—whether competitive or monopoly—were directed narrowly toward explaining how firms in markets “administer” existing known and available resources, “whereas the relevant problem is how it [capitalism] creates and destroys them” (1942, 84). In his “creative destruction” process of long-term economic improvement, price competition or its absence, the focus of standard competitive and monopoly models, is not inconsequential, but price competition obviously pales in comparison with the importance of actual competition, or the threat of competition, from innovations, which can cover new products, new technologies, and new types of organizational structures. Competition from these sources strikes “not at the margins of the profits and the output of the existing firms but at their [the firms’] foundations and their very lives” (1942, 84).²⁷ According to Schumpeter, without including an analysis of this type of nonprice competition, any discussion of markets, even though technically correct, is as empty as a performance of “Hamlet without the Danish prince” (1942, 86).

Schumpeter’s “perennial gale of creative destruction” can easily, although mistakenly, be viewed solely as a positive commentary on the role of firms in highly competitive market environments, not monopoly, under capitalism. Schumpeter, however, saw the market process in more complex and complete terms, which ultimately made monopoly a strategically important force for social good in any dynamic, or would-be dynamic, economy. Firms that are able to charge above-competitive prices might indeed earn, for a time, monopoly profits.²⁸ However, if firms could not hope to earn more than “normal profits” (or the minimal return capital must have to stay in place), they might not emerge with the same frequency that they do, because they would have drastically impaired incentives to innovate (1942, 102).²⁹ Besides, monopolies “largely create what they exploit. Hence, the usual conclusion about their influence on long-run output [that overall economic growth should be choked] would be invalid even if they were genuine monopolies in the technical sense of the term” (1942, 101).³⁰

Moreover, the monopoly profits “might still prove to be the easiest and most effective way of collecting the means by which to finance additional investment [i.e., expansion]” (1942, 87), a line of argument that underlies the granting of monopoly privileges through copyrights and patents.³¹ Surely, Schumpeter also understood (as did Smith) that the prospects of monopoly profits would make the financing of initial forays into markets all the easier and cheaper. Just as surely, he understood that the probability of monopoly profits over a range of entrepreneurial ventures—whether taken up in a single firm or across an array of entrepreneurial investments—could encourage the development of investment portfolios, which can reduce investment risks and, thereby, encourage investments and innovations.

In an important way, Schumpeter appears to be arguing that the instances of monopoly, or market power, in a broader economy are an unheralded force behind Adam Smith’s “invisible hand.” Monopolies actually energize “creative destruction.” In seeking to create monopolies and earn above-competitive profits, new firms are forever destroying existing monopolies. In the process, these new entrants may, by accident or direct intention, be giving rise to new and improved products, technologies, and organizational forms, or over time the economy is able to grow faster because at each point in time, monopolies are holding it back. Put another way, monopolies are a “necessary evil” (1942, 106).³² In drawing what many might see as a paradoxical conclusion, Schumpeter suggests, “There is no more paradox in this [case for monopolies] than there is in saying that motorcars are traveling faster than they otherwise would *because* they are provided with brakes” (88; emphasis in the original).

But then, Schumpeter could rest comfortably in what he believed to be the reality of market life: Monopolies were short-lived practically everywhere—at least when unprotected by governments, precisely because of the “gale of creative destruction”: “The power to exploit at pleasure a given pattern of demand . . . can under the condition of intact capitalism hardly persist for a period long enough to matter for the analysis of total output, unless buttressed by public authority” (1942, 99). In contrast to Smith and others, Schumpeter doubts that even firms protected by significant entry restrictions can long endure if they do what monopolies are supposed to do, restrict their outputs to raise their prices (99).³³

Schumpeter concludes, “Perfectly free entry into a *new* field may make it impossible to enter it at all. The introduction of new methods of production and new commodities is hardly conceivable with perfect—and perfectly prompt—competition from the start. And this means that the bulk of what we call economic progress is incompatible with it” (1942, 104–5; emphasis in the

original). That is to say, economic progress is compatible only with the existence of monopoly profits of some (unstated) degree. It follows that entry barriers have social value, at least up to a point.

Why, then, is there so much talk about the “evils” of monopoly? Schumpeter suggested that it is largely unrecognized demagoguery at work: “Economists, government agents, journalists, and politicians in this country obviously love the word because it has come to be a term of opprobrium which is sure to rouse the public hostility against any interest so labeled” (1942, 100). At the same time, he clearly believed that monopolies’ ease of movement among markets and of arising in new markets, and thereby destroying others, would inevitably cause large firms with market power to be frequently subjected to “vindictive harassment” by antitrust authorities (Mason 1951, 144).³⁴

But then, Schumpeter was not the first to focus on the destructive side of markets or the integral role monopolies play in that process, a point most recently stressed by Michael Perelman (1995). David Wells (1828–89)—a chemist by training but acclaimed as one of the more important economists of the last quarter of the nineteenth century (Ferleger 1977), in spite of working for the federal government as Special Commissioner of Revenue—saw competition pushing capitalism to the brink of self-destruction. The source of the self-destructive competition was rapid technological advances, spawned principally by “great industrial enterprises,” pushing the economy relentlessly toward excess capacity, overproduction, and deflation (and the country’s price index did fall by nearly half during the last third of the century). Wells saw an integral connection between progress and the destruction of wealth, which he characterized as an “economic law,” which has all the markings of Schumpeter’s “perennial gale”: “All material progress is affected through the destruction of capital by invention and discovery, and the rapidity of such destruction is the best indicator of the rapidity of progress” (1889, 146).³⁵

For Schumpeter, monopolies were collectors of investment funds, which made them a wellspring of new innovations that ultimately fuel the creative destruction process, a part of which was the dethroning of existing monopolies by new ones. Wells also saw monopolies as a wellspring of inventions and discoveries. However, he also saw in them another source of social value, the only potential check on overproduction: “There appears to be no other means of avoiding such results than that the great producers come to an understanding as to the prices they will ask; which, in turn naturally implies agreements to the extent to which they will produce” (Wells 1889, 74), an advantage of monopoly that Schumpeter specifically rejected (1942, 106). Like Schumpeter, Wells worried that antitrust laws would have the opposite effect of the one intended. In Wells’s case, he feared that antitrust enforcement would

ensure the continuation of self-destructiveness (through overproduction) of supracompetitive markets (unless they were used to thwart trusts, such as Standard Oil, that have used their ability to raise capital to drive up output and drive down prices).³⁶ Schumpeter, on the other hand, emphasized how the indiscriminate pursuit of trust busting would undermine the innovative vitality of the economy (1942, 91).

THE SCHUMPETER HYPOTHESIS

If Schumpeter had left his assessment of the relative merits of competitive and monopoly markets totally conceptual, without concrete direction on the nature of the testable facts, he would have certainly retained his honored status within the annals of economic thought. However, just as surely, the generations of economists and policymakers who followed him would not have seen Schumpeter's thinking subjected to as much following econometric work, nor cited as frequently. Over the past sixty-some years, econometricians have created a nonconsequential competitive industry of their own as they have sought to test the so-called Schumpeter hypothesis, which was best stated by Schumpeter in this way: "As soon as we go into the details and inquire into the individual items in which progress has been most conspicuous, the trail leads not to the doors of those firms that work under conditions of comparatively free competition but precisely to the doors of the large concerns" (1942, 82).

The Schumpeter hypothesis has, of course, been reformulated by a series of economists for their own research needs.³⁷ Econometricians have also produced a sizable number of studies that have attempted to draw statistically validated connections between various measures of, on the one hand, firm size, industry concentration, market power, or retained business earnings and, on the other hand, various input measures of innovativeness of firms (e.g., their R&D expenditures) and output measures of their inventiveness (e.g., patents awarded firms). The statistical deductions drawn have been, unfortunately, all over the econometric map, with some studies showing a growth in R&D expenditures or patents awarded with growth in firm size, and other studies showing the opposite (Baumol 1990; Scherer 1965; Hamberg 1964; Horriwitz 1962; Jennings 1989; Jennings and Lumpkin 1995).³⁸ Then, more studies have shown an initial increase in input and output measures of the innovativeness and inventiveness of firms with growth in size, only to be followed by a decline.³⁹

Of course, the researchers have also found that the relationship between firm size and measures of innovativeness and inventiveness differs by industry (Worley 1961; Schmookler 1959; Mansfield 1963, 1964).⁴⁰ However, econo-

mists who have reviewed this literature have found the Schumpeter hypothesis wanting at best. Moreover, Scherer (1970, 377) deduced from all the work done through the late 1960s that “new entrants contribute a disproportionately high share of all really revolutionary new industrial products and processes,” although he had earlier cautioned that “perhaps a bevy of fact-mechanics can still rescue the Schumpeterian engine from disgrace” (1965, 1122). In their extensive review of the studies on the Schumpeter hypothesis through the early 1970s, Kamien and Schwartz concluded that “the evidence indicates that research output intensity does tend to increase and then decrease with increasing firm size” (1975, 3).⁴¹

Link (1980) could have been one such “fact-mechanic,” given that he has argued that the rate of return on firms’ R&D expenditures is a far better test of the Schumpeter hypothesis than, say, R&D expenditures and patents awarded. After all, the payoff from innovative activity is of greater interest to owners than the absolute real level of their expenditures or the count of patents (whose worth can vary greatly). In his study of firms in the chemical and allied products industry using 1975 data, Link found substantial economies of scale on R&D expenditures, as measured by their rate of returns. Small firms (those with less than \$300 million in sales) had a rate of return on their collective R&D expenditures of 30 percent. Large firms had a rate of return of 78 percent, which should imply greater innovative activity among larger firms—at least in the chemical industry (and Link chose the chemical industry to study because the industry’s R&D expenditures were affected only to a limited extent by government funding).⁴²

A number of empirical problems arise in testing the Schumpeter hypothesis. For example, we can’t be confident that measured variables—for example, firm size measured by sales or industry concentration ratios—are reasonable surrogates for the kind of market power Schumpeter had in mind. Moreover, R&D expenditures are hardly the only use to which large firms can put their (monopoly) profits (Markham 1965; Fisher and Temin 1965; Cohen and Levin 1989). After all, Schumpeter stressed that innovation could come in the form of changes in firm organization or, for that matter, advertising campaigns. In addition, it is not altogether clear whether the R&D expenditures were the result or cause of firm size and market dominance. Indeed, as Nelson and Winter (1982) have argued, the market structure is endogenous to Schumpeterian competition, suggesting that R&D expenditures and firm size emerge together.

Finally, the full impact of large firms, or firms with measures of monopoly power, may be more indirect than researchers have imagined. With technol-

ogy in product and process development progressing along so many avenues, the top 100 or 500 largest firms in an industry, or even the entire economy, which are the focus of a number of econometric studies, can hardly be expected to investigate all avenues of innovation. They must pick and choose their innovation avenues (and their risks), often with an eye to how their R&D work will complement their existing product line, leaving much for outsiders to do that breaks with existing product lines.⁴³ Top firms’ own bureaucracies can hold them back on the range and depth of their entrepreneurial activities. They can, however, set themselves up as cherry pickers, that is, they can wait and see what products emerge from much smaller and newer firms and show signs of becoming successful. They can then step in and buy up the successful smaller firms, with the larger firms using their well-established distribution systems to make the newly developed products and processes more successful than they otherwise would be. The existence of the large firms, along with their willingness and ability to pay supracompetitive prices (because of their market power) for demonstrated successful innovations, can inspire much entrepreneurial activity among smaller firms—and, hence, can be viewed as an important force for innovation among small firms and new entrants.

Having said all of this, it is important to note that Schumpeter was careful to stress that any assessments of the impact of the monopoly power of large firms could be properly made only over a long stretch of time, covering decades, at the very least, and perhaps a century or more. Even then, he was careful to add addenda to his so-called hypothesis: (1) that “mere size is neither necessary nor sufficient for the superiority of the monopoly firm” (1942, 101) and (2) that the critical dependent variable would be some variant of the overall “standard of living,” not some narrowly conceived measure of firm size or industry concentration.⁴⁴

Researchers have done their studies, apparently assuming that Schumpeter was fixated exclusively on firm size. Although he often wrote about large firms in *Capitalism, Socialism, and Democracy*, his principal concern throughout his major book-length works was really the “character and quality” of entrepreneurship and leadership within firms, large or small, as McNulty (1974) has argued in some detail.⁴⁵ Indeed, as Chamberlin (1951) argued early in the debate, Schumpeter practically dismissed altogether economies of scale per se as a source of firm size (and therefore didn’t give much credence to the theory of monopolistic competition). If there was any initial fall in long-run average cost, the source was the lumpiness of plant and equipment, not any technical advantage that firms achieve from expanding all factors of production. In Schumpeter’s world, firms might appear to face decreasing long-run cost func-

tions, which might appear to be the source of their size, but appearances can be deceiving. The ongoing pace of innovation in production processes, which lower firms' cost curves, is a key cause of lower costs with expanded size.⁴⁶

CONCLUDING COMMENTS

Obviously, the word *monopoly* has been used in a variety of contexts throughout the history of economic thought. The term has been used to describe (if not denigrate) the inherent privileges of property owners, given that no one else has access to the owners' rights without dealing with the owner. *Monopoly* has been used to characterize large business firms (without regard to their market shares), as well as firms that are the dominant, if not the only, producers in their markets. A key unifying feature of firms tagged as monopolies has been the firms' ability to significantly affect total market supply of their products, enough at least for them to have some choice over their selling prices. This choice gives them the capacity to seek maximum profits, within the constraints of their cost and demand schedules. Of course, *monopoly* and *cartel* have been used synonymously, because a cartel can supposedly do, once it has been organized, what a single (or dominant) producer can do with almost the same facility (which, as we will argue later, is not likely to be the case).

However, *monopoly* has also been used to describe firms that have been able to raise their prices, as well as production levels, because of imposed governmental restrictions on competition, for example, through copyrights, patents, tariffs, and quotas, or, for that matter, trade secrets, trademarks, and brands. Such firms are said to be monopolies because with the market protections, they all can sell their goods above cost.

In the views of the economic masters covered in this chapter, except for Schumpeter (and, to a lesser extent, Wells), one feature stands out: No matter how the term has been used, monopoly has been viewed at best as a "necessary evil," as in the cases of land property rights, and at worst in other cases (with few exceptions, such as in Smith's argument that monopoly might be a useful device for encouraging especially hazardous market ventures) as a drag on consumer welfare, disposable income, and economic progress. At the same time, all writers covered appear to be unified on an important point: Absent government support, monopolies that endure for long are likely to be rare, which implies that any damage done is not likely to persist, mainly because in raising their prices above costs, monopolists inspire competitors to enter their markets.

Schumpeter clearly agrees that monopolies that spring solely from market strategies, unsupported by government protection, are likely to be relatively

short-lived. Indeed, he suggests that the only market structure likely to be rarer than perfect competition in the world outside economists’ classrooms is a firm that persistently behaves like a monopoly, that is, restricts its sales to push up its prices, and then survives.⁴⁷ That claim allows Schumpeter to stress the largely unheralded role of monopolies in fueling the “capitalist achievement,” not so much price competition, in which consumer values remain constant, but rather in promoting nonprice competition, in which the value of available goods is constantly being upgraded, but with price competition ever-present, albeit derivative factors that make innovations accessible to the masses.⁴⁸ So what if the monopolist doesn’t produce with the efficiency of a perfectly competitive market? That idealized standard is unachievable. Moreover, even if it were achievable, any harm done by any monopoly’s restriction on output must be juxtaposed with the gains from product and production process improvements. Otherwise, reconciling the growth in human welfare in the latter part of the nineteenth century and early part of the twentieth century (if not beyond), a time when many companies were expanding rapidly and gaining control over price, is difficult, as Schumpeter stressed.⁴⁹

Although much is to be gained from using perfect competition for evaluating price competition and from standard monopoly models, which help illustrate the standard negative assessment of monopoly that extends back to Smith and forward to the prevailing sentiment among modern textbook writers, it is the Schumpeterian view of monopoly that drives the development of this book and, to the extent adopted, forces a change in the perception of policies related to monopoly.⁵⁰ Under the Smithian view of monopoly, all trade restrictions, regulations, and private efforts to monopolize markets have a single policy solution: Get rid of them.⁵¹

From the Schumpeterian perspective, however, the solution is not so easy. Hidden in Schumpeter’s analysis is a theory of *optimum monopoly* required for maximum economic growth.⁵² Such a theory necessarily implies that a “delicate” (Schumpeter’s word) balance be struck not only in matters of antitrust enforcement but also in all other government policies relating to market restrictions and regulation, whether they spring from private or public sources.⁵³

We take up in this book a largely Schumpeterian view of monopoly—perhaps more accurately dubbed and widely known as Schumpeterian competition—in part because his view has been lost on many economists and policymakers, especially in the antitrust area, as seen in monopoly presentations in modern textbooks that we lay out in the following chapter. We also take up the Schumpeterian perspective because Schumpeter was, in our view, actually overly conservative in his criticisms of monopoly theory as it existed in his day,

and as that theory has been brought forward with updates and extensions. A critique of modern monopoly theory should include a reexamination of the impact of the emergence of monopoly on the net inefficiency—and extent of failure—in markets. This reexamination acknowledges that price changes, up or down, affect the marginal value of the last unit buyers consume, but reexamination directly challenges the conventional microeconomic claim that price changes have no effect on the *schedule* of consumers' marginal values of various units, a claim that necessarily implies that price changes do not affect market demand.⁵⁴ The adjustments we propose in basic monopoly theory have been all the more relevant because of the emergence of many modern goods, the value of which is founded on such considerations as networks, experience, and trust.

Moreover, there has been a long-term decline in the marginal cost of production in many industries relative to total cost. Today, a growing number of goods can be reproduced at zero or close to zero marginal cost (as in the case of electronic goods: e-books, e-music, e-movies, and so on). These cost factors force a reconsideration of the social value of monopolies and their protective entry barriers, as we will argue at practically every step in this book. This means that our critique of monopoly theory stands on, but then moves beyond, Schumpeter's key insights.