Introduction

Students today often view antitrust law as an *ex nihilo* creation of recent vintage. The received narrative understands the passage of the Sherman Antitrust Act in 1890 as a radical reformist moment that injected a new legal being into American law and political economy. This new being was, like the early earth of Genesis, “without form and void.” Unbounded by precedent or concrete legislative history, the Supreme Court began to pour meaning into the statute. Lacking any robust economic framework, the Court stumbled along for half a century with vague economic and moral intuitions concretized into legal formalisms and bolstered by vacuous rhetoric. Then, after World War II, the Court discovered economic theory, but the wrong kind. Latching onto weakly supported Harvard School structuralist assumptions, the Court created an unduly interventionist antitrust policy that thwarted efficient business practices. In the sixties and seventies the Chicago School rode to the rescue with a stronger economic theory that debunked most of the shallow preexisting thinking but pushed antitrust to the verge of extinction. Only in recent years has a post-Chicago School—the third wave of intellectual-economic thinking on competition policy—emerged to identify excesses of Chicago School theory and breathe new life into the antitrust enterprise.

This received narrative is myopic and incomplete. The Sherman Act was far from a radical or unprecedented statute, and Harvard School structuralism was far from the first economic theory of competition policy. Although 1890 serves as a useful demarcation of the beginnings of federal antitrust law, the political and intellectual issues raised by the statutes are far older than even the beginnings of the American republic. Competition policy has long been an economic issue, and it has long lent itself to economic theorizing. To reduce intellectual theories of competition policy to phenomena since World War II is to miss a deep and rich lineage of ideas.

The received narrative not only fails to understand the past but provides little help in predicting the future. Studied in historical perspective, competition policy appears less a linear progression, refinement, and cumulative development of ideas than a cyclical dialectic of attitudes, insights, and ideologies. Take, for example, the question of whether private actors or the state is more likely to contribute to entry barriers and other dislocations of
competition. Or whether scale economies tend to perpetuate or diminish market competitiveness. One can find clashes on these sorts of questions not just between the Chicago and Harvard Schools but between, say, John Stuart Mill and David Ricardo, English political economists writing in the early and middle nineteenth centuries. Intellectual theories about competition policy did not originate in the twentieth century, and much of the older learning is relevant to predicting the cycling of perspectives in the future.

This book is designed to introduce the student of modern competition policy to intellectual debates that have taken place in the past and remain relevant to the present. Unlike standard law school case books that trace the development of statutes and case law, our focus here is not on legal history but on the development and clash of intellectual ideas. To that end, we have selected original intellectual contributions that introduce the contemporary reader to the arc of intellectual discourse.

Where to begin and what to include is an issue with any work of this kind. We have chosen to begin with Adam Smith. Just as easily, we might have begun with the mercantilist school against which Smith wrote and whose views have some resonance today, particularly on matters of trade policy. But lines must be drawn, and *The Wealth of Nations*’ iconic status as an originator of free market ideology and its influence on the development of American political and economic ideas make it a serviceable starting place.

From Smith and his English followers, David Ricardo and John Stuart Mill, we move to the American founding and sample the clash between Federalist and Anti-Federalist ideology on federal power over monopoly and competition. Our second chapter also samples midnineteenth-century Jacksonian themes by dipping into the formidable Thomas Cooley’s essay on limits to state control of private business.

Chapter Three surveys neoclassical economic thinking on competition and the monopoly problem at the time of passage of the Sherman Act. A selection from Alfred Marshall’s *Principles of Economics* and Arthur Hadley’s American adaptation of Marshall’s ideas introduce the leading themes. We also offer Henry Hatfield’s entertaining account of the 1899 Chicago Trusts Conference, which brought out the strangest assortment of intellectual, business, and political figures ever to convene at an antitrust conference.

The presidential election of 1912, which laid the political foundations for the passage of the Clayton and Federal Trade Commission Acts in 1914, provides the frame for Chapter Four. We are privileged to find speeches or essays on antitrust policy by the three major presidential candidates—William Howard Taft, Theodore Roosevelt, and Woodrow Wilson—each of whom qualified, uncharacteristically for White House seekers, as a public intellectual. Cumulatively, the candidates articulated the set of policy choices, on matters such as competition versus regulation and bureaucratic administration versus judicial governance, that would dominate competition policy for the following century.

In Chapter Five we move from the hurly-burly of electoral politics to the rarefied halls of academe with selections from the most important early-twentieth-century responses to classicalism’s assumption that markets are characterized by perfect competition. Joan Robinson, Edward Chamberlin, and John Maurice Clark each offered an account of market competition as far less than perfect, although their respective accounts of the mechanisms and characteristics of imperfect competition implied significantly different policy responses.
The New Deal, the subject of Chapter Six, is the moment at which the greatest dispersion of intellectual views on competition policy appears within a single political coalition. We present selections from Louis Brandeis, Adolf Berle and Gardiner Means, Rex Tugwell, and Thurman Arnold. All were prominent in the New Deal coalition, and yet their views reflect a range of preferences from atomistic competition to the displacement of competition by governmentally mediated cartelization and control. Importantly, each of the competing intellectual schools not only received a hearing in the New Deal’s corridors of power but dominated policy during some period during the New Deal.

Chapter Seven contains a single selection: Richard Hofstadter’s magisterial essay on the seeming disappearance of the antitrust movement. Hofstadter’s essay differs from other selections in this book insofar as it engages in intellectual history directly as opposed to presenting theoretical arguments about competition that subsequently become important to the intellectual history of the field. Standing at roughly the midpoint of this book, Hofstadter’s essay provides a useful moment to consolidate the reader’s understanding of the intellectual currents that preceded Hofstadter and to frame the intellectual debates that follow.

Although the primary focus of this work is on Anglo-American influences on U.S. competition policy, we have not neglected the dominant postwar continental influence, German ordoliberalism. In Chapter Eight, we take an excursion across the Atlantic to consider the influence of Franz Böhm, Walter Eucken, Hans Grossmann-Doerth, and other ordoliberals on the development of German and European competition law. Ordoliberalism serves as a useful contrast and comparison to the development of English and American ideas and helps the non-continental observer understand some of the past and present ideological differences between antitrust law in Brussels and Washington.

In Chapter Nine, we introduce a pairing of selections that have become synecdoches for two ostensibly conflicting views of the relationship between competition and innovation. Drop the names Schumpeter and Arrow in any antitrust gathering, and a complex of dueling empirical and theoretical claims and policy trade-offs instantly come to mind. It does not matter that Joseph Schumpeter wrote *Capitalism, Socialism, and Democracy* more than twenty years before Ken Arrow wrote his essay on *Economic Welfare and the Allocation of Resources for Invention*, that Arrow was not directly responding to Schumpeter, or that the two works’ styles are completely different—one florid and metaphysical, the other technical and mathematical. What’s important is that the “Schumpeter vs. Arrow” debate has become a stylized blueprint for antitrust discourse and, alas, that many of those who engage in this discourse may never have read either Schumpeter or Arrow.

Chapter Ten picks up where most modern students of antitrust policy begin, with the Harvard School structuralism of Joe Bain, Carl Kaysen, Don Turner, and Phil Areeda. The Structure-Conduct-Performance paradigm was simple and eloquent and dominated antitrust policy the early decades of the postwar era. The paradigm ultimately collapsed under the weight of the ascendant Chicago School, with Turner even undergoing a self-described conversion experience toward a less interventionist perspective. Still, Harvard School thinking continues to exert influences, with weak structural presumptions continuing to play a role in merger analysis and a new Harvard School questioning the capacities of generalist judges and juries to decide complex antitrust matters.
In Chapter Eleven, we turn to Hyde Park and the Chicago School of antitrust analysis. Choosing the relevant selections was difficult, given the wide variety of perspectives under the Chicago School umbrella. We settled on passages from Levi and Director, Stigler, Bork, and Posner as representative of the progression and divergence of ideas within the Chicago School. Space and presentation constraints required omission of other important Chicago School pieces, such as Frank Easterbrook’s *The Limits of Antitrust*, John McGee’s influential article on predatory pricing, and Ward Bowman’s work on intellectual property and antitrust policy. With the Chicago School, we see not only a broad theoretical attack on interventionist antitrust thinking but an effort to “get into the weeds” of antitrust law, discussing the economic assumptions underlying antitrust treatment of specific competitive practices such as tying, vertical integration, and predatory pricing. This increasingly technical shift in the intellectual literature means that it is harder to capture the thrust of the school in a few general and accessible essays. As Hofstadter both reflected and anticipated in 1964, antitrust policy is increasingly the province of specialized bureaucrats, lawyers, and economists working on discrete and technical economic and policy problems.

And that makes our job in Chapter Twelve—on transaction cost economics and the post-Chicago School—even more difficult. Unlike the simple elegance of the Harvard School, there is no comprehensive, unifying theory of post-Chicago antitrust. Post-Chicago is largely a collection of those dissatisfied with Chicago School orthodoxy and steeped in alternative frameworks (such as game theory and behavioralism) to the rational, profit-maximizing *Homo economicus*. Whether post-Chicago is yet a coherent school of thought is subject to debate. Still, the Chicago School is certainly not the end of antitrust history, and so we conclude this book in the middle of an ongoing conversation.

In order to provide context for, and continuity between, the chapters, we introduce each with a short essay. We hope that our essays do not steal the thunder of the selections that follow. Our goal is for students of antitrust to encounter original voices in the intellectual history of competition policy—and to hear in all of them themes that continue to reverberate today.

Daniel A. Crane
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Classical Theories

Introduction

By Herbert Hovenkamp

Modern economics in the United States and much of western Europe developed through two broad and loosely defined movements. First was “classical political economy,” associated most strongly with Adam Smith, whose *The Wealth of Nations* was published in 1776, and carried forward by Thomas Malthus, David Ricardo, James Mill and his son John Stuart Mill, Jean Baptiste Say, and others. The second movement, of which more later, was neoclassicism, or neoclassical “economics.” Most of the classical text authors in Great Britain and the United States called their discipline “political economy,” emphasizing that their thinking was mainly about policy. For Adam Smith and most of his followers, political economy was a “positive” study of actual government economic policy and “normative” recommendations about policy. In the second half of the nineteenth century economics began to become more technical and far more mathematical. The incorporation of marginal utility theory into economics led to what we today call the neoclassical revolution. This shift toward mathematical technique also led the early neoclassicists, particularly Alfred Marshall, to call their discipline “economics” in order to emphasize its scientific status and set it apart from the moral philosophy and historicism that characterized classical writing.

Classical political economy articulated the ideology of market-based capitalism and its displacement of feudalism, mercantilism, and the hierarchical economic structures that had characterized the Middle Ages. The classical political economists did not invent capitalism, however. The rise of the merchant-and-manufacturer-dominated middle class was well under way by Smith’s time, transferring the economic center away from agriculture and toward industrial production and trade, and also transferring wealth away from large land owners and toward factory owners and traders. Much of what Adam Smith wrote about in *The Wealth of Nations* reflected rather than caused this fundamental change. For example, the

1. One very important early exception was Antoine August Cournot, whose highly mathematical *Researches on the Mathematical Principles of the Theory of Wealth* was published in French in 1838.
The Making of Competition Policy

Statute of Monopolies, which severely limited the Crown’s power to grant exclusive rights and has been described as one of the most important milestones in the transformation from a feudal to a capitalistic economy, was passed in 1624, a full century and a half before The Wealth of Nations was published.1

This new thinking loosened up the stranglehold that the landed classes had on the economy by emphasizing the value of production and markets and the evils of state favoritism. Thus The Wealth of Nations is best read as a defense of emergent but not-well-articulated doctrines of (1) free exchange and, correspondingly, hostility toward restraints on alienation or trade; (2) extreme hostility toward state created exclusive rights; and (3) the view that wealth lies in productive power and its effective use rather than ownership of a great deal of static wealth in land. Most important of all, the proposition that The Wealth of Nations defended so skillfully was a trust that unrestrained and largely unorganized market trading would achieve these values much more than the command and control of any king or other government leader, no matter how well intended.

The work of classical political economists in the United States was heavily, although not exclusively derivative of, the great British thinkers. None of the Americans achieved the recognition that has been given to Smith, Malthus, or Mill. Ironically, however, classical political economy influenced economic policy in the United States much more than England or Europe. Through most of the nineteenth century England had a large and impoverished working class that was well represented in the House of Commons, leading to many flirtations with socialism. In sharp contrast, labor was scarce in nineteenth-century America, and the allure of the West, accompanied by easy migration and at least the hope of upward mobility, provided a fertile political ground for classicism’s espousal of free markets and hostility toward monopoly. Only in the very late nineteenth century did this view begin to change, driven environmentally by the rise of the large business firm and the emergence of a substantial working class, and intellectually by the gradual displacement of classicism with marginalism. By 1890, when the Sherman Act was passed, British classicism had largely been supplanted by neoclassicism. Cambridge University Alfred Marshall’s great, consensus-forming Principles of Economics was published that same year. For economists in the United States the neoclassical revolution came later, took longer, and was attended by much more controversy. For example, the American Economic Association was formed in 1885 and immediately became a battleground of classical and neoclassical ideas.

The Sherman Act was thus passed during a time of great controversy in economic theory. The statute was controversial among economists, with more opposing it than favoring it. But that observation hardly tells the whole story. Many of the opponents were classicists, whose ideas were on the way to obsolescence. Among the rising marginalists the story was more complicated. They split into conservative and Progressive factions with strongly differing views about antitrust policy.

Had the statute been nothing more than a prohibition on cartels it would certainly have been less controversial, but both the language and the legislative history of the Sherman

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Act indicated that it was intended to go much further. The language in §1 prohibiting “combinations” in restraint of trade was intended to refer not just to collusion but also to the giant trusts, to business firm mergers, and joint production. The prohibitions on “monopolizing” conduct in §2 of the statute did not refer to the state-created monopolies that were so anathema to the classicists but rather to purely private aggregations of economic power. To a classicalist these were readily seen as efforts not to protect the market but rather to interfere with its natural workings.

The three excerpts from Adam Smith, David Ricardo, and John Stuart Mill provide a good platform for understanding why the more traditional political economists in the United States were so ambivalent and even hostile toward the Sherman Act.

Adam Smith (1723–1790) was a Scottish moral philosopher and political economist who is generally regarded (with David Hume) as one of the most prominent members of the Scottish Enlightenment. He was educated at Glasgow and Oxford and lectured for a time at the University of Edinburgh, although he spent most of his career back at Glasgow. His most famous book has the full title *An Inquiry into the Nature and Causes of the Wealth of Nations*, although an earlier book, *The Theory of Moral Sentiments* (1759), is widely regarded as one of the classics of Scottish psychology and moral philosophy. The passage of *The Wealth of Nations* printed below is widely regarded as the classic defense of the free, unrestrained market and of classicism’s objections to state authorized monopoly. In the process Smith explains some very fundamental ideas, such as the relationship between supply and demand, why prices rise under short supply even when markets are competitive, and why monopoly produces higher prices than competition.

Reading *The Wealth of Nations* is a little like viewing the Mirror of Erised in *Harry Potter*: the person viewing it sees that thing which he or she desires most. The final excerpt includes one of its most widely quoted passages, which is on the evils of price fixing: “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” (Book I, Ch. 10, §82). Today this passage is sometimes quoted in jury instructions in criminal price-fixing cases as suggesting that a meeting alone is circumstantial evidence of a price-fixing conspiracy.

In another highly influential passage Smith also expressed strong distrust of the large business corporation because the combination of shareholders being absent and managers controlling “other people’s money.” Smith wrote of the large “joint stock company” of his day:

The directors of such companies, however, being the managers rather of other people’s money than of their own, it cannot well be expected that they should watch over it with the same anxious vigilance with which the partners in a private copartnery frequently watch over their own. Like the stewards of a rich man, they are apt to consider attention to small matters as not for their master’s honour, and very easily give themselves a dispensation from having

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3. See, e.g., *United States v. Taubman*, 297 F.3d 161 (2d Cir. 2002) (use of this quotation in prosecutor’s summation to jury was harmless error). See also *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 591 (2007) (Stevens, J., dissenting).
Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company. It is upon this account that joint stock companies for foreign trade have seldom been able to maintain the competition against private adventurers. They have, accordingly, very seldom succeeded without an exclusive privilege, and frequently have not succeeded with one. (book V, ch. 1, §107)

This passage has been cited countless times by antitrust activists, as well as those seeking greater government control of business corporations. It became the title of a book by Justice Louis Brandeis attacking the financial industry, and it was particularly influential during the New Deal for supporting the argument based on the “separation of ownership and control” supporting greater government regulation of corporate securities.

David Ricardo (1772–1823), a British businessman, speculator, and member of Parliament late in his life, did not have a university position. He was inspired to political economy by reading Adam Smith, and as an avocation he devoted much of his life to developing economic doctrine more systematically than Smith had. His primary book, *Principles of Political Economy and Taxation*, was published in 1817.

Ricardo’s doctrine of “rents,” developed in the excerpted passage, indicates that marginalism appeared as an economic concept much earlier than the late nineteenth century, where it is usually identified with the writings of Jevons and Marshall in England and Menger and Walras on the Continent. The theory of rents is in fact a theory about marginal production—namely, that the most efficient land will be placed into production first, and then somewhat-less-efficient land, and so on until the very last piece of land placed into production (“at the margin”) will earn just enough to provide a competitive rate of return. The doctrine was widely regarded as pessimistic because it served to explain why old and wealthy landowners could amass great wealth while having no incentive to increase productivity. For example, if production on the most favorable land costs $10 per unit while that on the marginal land costs $30, the market clears at a price of $30 and the owners of the most favorable land simply pocket the difference. Karl Marx himself relied on Ricardo’s theory to justify appropriation and socialism.

Ricardo’s doctrine of rents was much less popular among American classicists than among the British. For example, Henry Carey, whose *Principles of Political Economy* was published in 1837, flatly rejected Ricardo’s theory as having no application to the United States. Rather, he said, it tended to apply to heavily developed countries whose land had all been claimed, and where population increases had driven production to subsistence levels. In sharp contrast, vast areas of the United States remained an undeveloped wilderness.

4. Louis D. Brandeis, *Other People’s Money and How the Bankers Use It* (1914).
Other elements of Ricardo’s theory remain essential to antitrust to this very day. For example, firms have differing costs, and in a competitive market the price is determined by the average costs of the “marginal” firm. Firms that have access to lower cost inputs may earn higher profits. But these “rents” must be distinguished from monopoly because a firm enjoying rents has no power to raise the market price by producing less.

John Stuart Mill (1806–1873) was the son of James Mill, another political economist. His fame rivals that of Adam Smith, but mainly because of his writings on utilitarianism and political philosophy. His *Principles of Political Economy* (1848) represented the high point of classical political economy, but he also became a lightning rod that inspired the first generation of marginalists. Most importantly, his writings on philosophy, like those of Jeremy Bentham, strongly advocated a “utility” theory of value, which was a defining characteristic of marginalism. But Mill never succeeded in fusing utilitarianism with his economic theory. Rather, his *Principles* jumps ambiguously between a backward-looking theory of value based predominantly on land and previously invested labor, and the more forward-looking marginal utility theory that became neoclassical economics.

The excerpt given from Mill’s *Principles* is one of the great early texts of industrial organization theory, explaining the value of organization as a business firm, the relationship between firm size and market size, economies of scale, natural monopoly, the value of a higher ratio of capital to labor, and other determinants of industry structure.

Adam Smith

*The Wealth of Nations*

Of the Natural and Market Price of Commodities

There is in every society or neighbourhood an ordinary or average rate both of wages and profit in every different employment of labour and stock. This rate is naturally regulated, as I shall show hereafter, partly by the general circumstances of the society, their riches or poverty, their advancing, stationary, or declining condition; and partly by the particular nature of each employment.

There is likewise in every society or neighbourhood an ordinary or average rate of rent, which is regulated too, as I shall show hereafter, partly by the general circumstances of the society or neighbourhood in which the land is situated, and partly by the natural or improved fertility of the land.

These ordinary or average rates may be called the natural rates of wages, profit, and rent, at the time and place in which they commonly prevail.

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7. All firms in a competitive market will increase output to the point that their marginal cost equals the market price, but they will earn a higher return on the fixed-cost component because they are paying less for it. For example, consistent with Ricardo’s observations, if the superior land were rented, the tenant would pay a price for it such that it earned only the competitive return, and the landlord would pocket the surplus.
When the price of any commodity is neither more nor less than what is sufficient to pay the rent of the land, the wages of the labour, and the profits of the stock employed in raising, preparing, and bringing it to market, according to their natural rates, the commodity is then sold for what may be called its natural price.

The commodity is then sold precisely for what it is worth, or for what it really costs the person who brings it to market; for though in common language what is called the prime cost of any commodity does not comprehend the profit of the person who is to sell it again, yet if he sells it at a price which does not allow him the ordinary rate of profit in his neighbourhood, he is evidently a loser by the trade; since by employing his stock in some other way he might have made that profit. His profit, besides, is his revenue, the proper fund of his subsistence. As, while he is preparing and bringing the goods to market, he advances to his workmen their wages, or their subsistence; so he advances to himself, in the same manner, his own subsistence, which is generally suitable to the profit which he may reasonably expect from the sale of his goods. Unless they yield him this profit, therefore, they do not repay him what they may very properly be said to have really cost him.

Though the price, therefore, which leaves him this profit, is not always the lowest at which a dealer may sometimes sell his goods, it is the lowest at which he is likely to sell them for any considerable time; at least where there is perfect liberty, or where he may change his trade as often as he pleases.

The actual price at which any commodity is commonly sold is called its market price. It may either be above, or below, or exactly the same with its natural price.

The market price of every particular commodity is regulated by the proportion between the quantity which is actually brought to market, and the demand of those who are willing to pay the natural price of the commodity, or the whole value of the rent, labour, and profit, which must be paid in order to bring it thither. Such people may be called the effectual demanders, and their demand the effectual demand; since it may be sufficient to effectuate the bringing of the commodity to market. It is different from the absolute demand. A very poor man may be said in some sense to have a demand for a coach and six; he might like to have it; but his demand is not an effectual demand, as the commodity can never be brought to market in order to satisfy it.

When the quantity of any commodity which is brought to market falls short of the effectual demand, all those who are willing to pay the whole value of the rent, wages, and profit, which must be paid in order to bring it thither, cannot be supplied with the quantity which they want. Rather than want it altogether, some of them will be willing to give more. A competition will immediately begin among them, and the market price will rise more or less above the natural price, according as either the greatness of the deficiency, or the wealth and wanton luxury of the competitors, happen to animate more or less the eagerness of the competition. Among competitors of equal wealth and luxury the same deficiency will generally occasion a more or less eager competition, according as the acquisition of the commodity happens to be of more or less importance to them. Hence the exorbitant price of the necessaries of life during the blockade of a town or in a famine.
When the quantity brought to market exceeds the effectual demand, it cannot be all sold to those who are willing to pay the whole value of the rent, wages and profit, which must be paid in order to bring it thither. Some part must be sold to those who are willing to pay less, and the low price which they give for it must reduce the price of the whole. The market price will sink more or less below the natural price, according as the greatness of the excess increases more or less the competition of the sellers, or according as it happens to be more or less important to them to get immediately rid of the commodity. The same excess in the importation of perishable commodities, will occasion a much greater competition than in that of durable commodities; in the importation of oranges, for example, than in that of old iron.

When the quantity brought to market is just sufficient to supply the effectual demand and no more, the market price naturally comes to be either exactly, or as nearly as can be judged of, the same with the natural price. The whole quantity upon hand can be disposed of for this price, and cannot be disposed of for more. The competition of the different dealers obliges them all to accept of this price, but does not oblige them to accept of less.

The quantity of every commodity brought to market naturally suits itself to the effectual demand. It is the interest of all those who employ their land, labour, or stock, in bringing any commodity to market, that the quantity never should exceed the effectual demand; and it is the interest of all other people that it never should fall short of that demand.

If at any time it exceeds the effectual demand, some of the component parts of its price must be paid below their natural rate. If it is rent, the interest of the landlords will immediately prompt them to withdraw a part of their land; and if it is wages or profit, the interest of the labourers in the one case, and of their employers in the other, will prompt them to withdraw a part of their labour or stock from this employment. The quantity brought to market will soon be no more than sufficient to supply the effectual demand. All the different parts of its price will rise to their natural rate, and the whole price to its natural price.

If, on the contrary, the quantity brought to market should at any time fall short of the effectual demand, some of the component parts of its price must rise above their natural rate. If it is rent, the interest of all other landlords will naturally prompt them to prepare more land for the raising of this commodity; if it is wages or profit, the interest of all other labourers and dealers will soon prompt them to employ more labour and stock in preparing and bringing it to market. The quantity brought thither will soon be sufficient to supply the effectual demand. All the different parts of its price will soon sink to their natural rate, and the whole price to its natural price.

The natural price, therefore, is, as it were, the central price, to which the prices of all commodities are continually gravitating. Different accidents may sometimes keep them suspended a good deal above it, and sometimes force them down even somewhat below it. But whatever may be the obstacles which hinder them from settling in this center of repose and continuance, they are constantly tending towards it.
The whole quantity of industry annually employed in order to bring any commodity to market, naturally suits itself in this manner to the effectual demand. It naturally aims at bringing always that precise quantity thither which may be sufficient to supply, and no more than supply, that demand.

But in some employments the same quantity of industry will in different years produce very different quantities of commodities; while in others it will produce always the same, or very nearly the same. The same number of labourers in husbandry will, in different years, produce very different quantities of corn, wine, oil, hops, &c. But the same number of spinners and weavers will every year produce the same or very nearly the same quantity of linen and woollen cloth. It is only the average produce of the one species of industry which can be suited in any respect to the effectual demand; and as its actual produce is frequently much greater and frequently much less than its average produce, the quantity of the commodities brought to market will sometimes exceed a good deal, and sometimes fall short a good deal of the effectual demand. Even though that demand therefore should continue always the same, their market price will be liable to great fluctuations, will sometimes fall a good deal below, and sometimes rise a good deal above, their natural price. In the other species of industry, the produce of equal quantities of labour being always the same, or very nearly the same, it can be more exactly suited to the effectual demand. While that demand continues the same, therefore, the market price of the commodities is likely to do so too, and to be either altogether, or as nearly as can be judged of, the same with the natural price. That the price of linen and woollen cloth is liable neither to such frequent nor to such great variations as the price of corn, every man's experience will inform him. The price of the one species of commodities varies only with the variations in the demand: That of the other varies not only with the variations in the demand, but with the much greater and more frequent variations in the quantity of what is brought to market in order to supply that demand.

The occasional and temporary fluctuations in the market price of any commodity fall chiefly upon those parts of its price which resolve themselves into wages and profit. That part which resolves itself into rent is less affected by them. A rent certain in money is not in the least affected by them either in its rate or in its value. A rent which consists either in a certain proportion or in a certain quantity of the rude produce, is no doubt affected in its yearly value by all the occasional and temporary fluctuations in the market price of that rude produce; but it is seldom affected by them in its yearly rate. In settling the terms of the lease, the landlord and farmer endeavour, according to their best judgment, to adjust that rate, not to the temporary and occasional, but to the average and ordinary price of the produce.

Such fluctuations affect both the value and the rate either of wages or of profit, according as the market happens to be either over-stocked or under-stocked with commodities or with labour; with work done, or with work to be done. A public mourning raises the price of black cloth (with which the market is almost always under-stocked upon such occasions) and augments the profits of the merchants who possess any considerable quantity of it. It has no effect upon the wages of the weavers. The market is
under-stocked with commodities, not with labour; with work done, not with work to be done. It raises the wages of journeymen tailors. The market is here under-stocked with labour. There is an effectual demand for more labour, for more work to be done than can be had. It sinks the price of coloured silks and cloths, and thereby reduces the profits of the merchants who have any considerable quantity of them upon hand. It sinks too the wages of the workmen employed in preparing such commodities, for which all demand is stopped for six months, perhaps for a twelvemonth. The market is here over-stocked with commodities and with labour.

But though the market price of every particular commodity is in this manner continually gravitating, if one may say so, towards the natural price, yet sometimes particular accidents, sometimes natural causes, and sometimes particular regulations of police, may, in many commodities, keep up the market price, for a long time together, a good deal above the natural price.

When by an increase in the effectual demand, the market price of some particular commodity happens to rise a good deal above the natural price, those who employ their stocks in supplying that market are generally careful to conceal this change. If it was commonly known, their great profit would tempt so many new rivals to employ their stocks in the same way, that, the effectual demand being fully supplied, the market price would soon be reduced to the natural price, and perhaps for some time even below it. If the market is at a great distance from the residence of those who supply it, they may sometimes be able to keep the secret for several years together, and may so long enjoy their extraordinary profits without any new rivals. Secrets of this kind, however, it must be acknowledged, can seldom be long kept; and the extraordinary profit can last very little longer than they are kept.

Secrets in manufactures are capable of being longer kept than secrets in trade. A dyer who has found the means of producing a particular colour with materials which cost only half the price of those commonly made use of, may, with good management, enjoy the advantage of his discovery as long as he lives, and even leave it as a legacy to his posterity. His extraordinary gains arise from the high price which is paid for his private labour. They properly consist in the high wages of that labour. But as they are repeated upon every part of his stock, and as their whole amount bears, upon that account, a regular proportion to it, they are commonly considered as extraordinary profits of stock.

Such enhancements of the market price are evidently the effects of particular accidents, of which, however, the operation may sometimes last for many years together.

Some natural productions require such a singularity of soil and situation, that all the land in a great country, which is fit for producing them, may not be sufficient to supply the effectual demand. The whole quantity brought to market, therefore, may be disposed of to those who are willing to give more than what is sufficient to pay the rent of the land which produced them, together with the wages of the labour, and the profits of the stock which were employed in preparing and bringing them to market, according to their natural rates. Such commodities may continue for whole centuries together to be sold at this high price; and that part of it which resolves itself into the rent of land
The rent of the land which affords such singular and esteemed productions, like the rent of some vineyards in France of a peculiarly happy soil and situation, bears no regular proportion to the rent of other equally fertile and equally well-cultivated land in its neighbourhood. The wages of the labour and the profits of the stock employed in bringing such commodities to market, on the contrary, are seldom out of their natural proportion to those of the other employments of labour and stock in their neighbourhood.

Such enhancements of the market price are evidently the effect of natural causes which may hinder the effectual demand from ever being fully supplied, and which may continue, therefore, to operate for-ever.

A monopoly granted either to an individual or to a trading company has the same effect as a secret in trade or manufactures. The monopolists, by keeping the market constantly under-stocked, by never fully supplying the effectual demand, sell their commodities much above the natural price, and raise their emoluments, whether they consist in wages or profit, greatly above their natural rate.

The price of monopoly is upon every occasion the highest which can be got. The natural price, or the price of free competition, on the contrary, is the lowest which can be taken, not upon every occasion indeed, but for any considerable time altogether. The one is upon every occasion the highest which can be squeezed out of the buyers, or which, it is supposed, they will consent to give: The other is the lowest which the sellers can commonly afford to take, and at the same time continue their business.

The exclusive privileges of corporations, statutes of apprenticeship, and all those laws which restrain, in particular employments, the competition to a smaller number than might otherwise go into them, have the same tendency, though in a less degree. They are a sort of enlarged monopolies, and may frequently, for ages together, and in whole classes of employments, keep up the market price of particular commodities above the natural price, and maintain both the wages of the labour and the profits of the stock employed about them somewhat above their natural rate.

Such enhancements of the market price may last as long as the regulations of police which give occasion to them.

The market price of any particular commodity, though it may continue long above, can seldom continue long below, its natural price. Whatever part of it was paid below the natural rate, the persons whose interest it affected would immediately feel the loss, and would immediately withdraw either so much land, or so much labour, or so much stock, from being employed about it, that the quantity brought to market would soon be no more than sufficient to supply the effectual demand. Its market price, therefore, would soon rise to the natural price. This at least would be the case where there was perfect liberty.

The same statutes of apprenticeship and other corporation laws indeed, which, when a manufacture is in prosperity, enable the workman to raise his wages a good deal above their natural rate, sometimes oblige him, when it decays, to let them down a good deal below it. As in the one case they exclude many people from his employment, so in the other they exclude him from many employments. The effect of such
regulations, however, is not near so durable in sinking the workman’s wages below, as
in raising them above their natural rate. Their operation in the one way may endure for
many centuries, but in the other it can last no longer than the lives of some of the work-
men who were bred to the business in the time of its prosperity. When they are gone,
the number of those who are afterwards educated to the trade will naturally suit itself
to the effectual demand. The police must be as violent as that of Indostan or antient
Egypt (where every man was bound by a principle of religion to follow the occupation
of his father, and was supposed to commit the most horrid sacrilege if he changed
it for another), which can in any particular employment, and for several generations
together, sink either the wages of labour or the profits of stock below their natural
rate.

This is all that I think necessary to be observed at present concerning the deviations,
whether occasional or permanent, of the market price of commodities from the
natural price.

Of Wages and Profit in the Different Employments of
Labour and Stock

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.

A regulation which obliges all those of the same trade in a particular town to
enter their names and places of abode in a public register, facilitates such assemblies. It
connects individuals who might never otherwise be known to one another, and gives
every man of the trade a direction where to find every other man of it.

A regulation which enables those of the same trade to tax themselves in order to
provide for their poor, their sick, their widows and orphans, by giving them a common
interest to manage, renders such assemblies necessary.

An incorporation not only renders them necessary, but makes the act of the
majority binding upon the whole. In a free trade an effectual combination cannot be
established but by the unanimous consent of every single trader, and it cannot last
longer than every single trader continues of the same mind. The majority of a corpora-
tion can enact a bye-law with proper penalties, which will limit the competition more
effectually and more durably than any voluntary combination whatever.

The pretence that corporations are necessary for the better government of the
trade, is without any foundation. The real and effectual discipline which is exercised
over a workman, is not that of his corporation, but that of his customers. It is the fear
of losing their employment which restrains his frauds and corrects his negligence. An
exclusive corporation necessarily weakens the force of this discipline. A particular set
of workmen must then be employed, let them behave well or ill. It is upon this account,
that in many large incorporated towns no tolerable workmen are to be found, even in some of the most necessary trades. If you would have your work tolerably executed, it must be done in the suburbs, where the workmen having no exclusive privilege, have nothing but their character to depend upon, and you must then smuggle it into the town as well as you can.

It is in this manner that the policy of Europe, by restraining the competition in some employments to a smaller number than would otherwise be disposed to enter into them, occasions a very important inequality in the whole of the advantages and disadvantages of the different employments of labour and stock.

David Ricardo

*Principles of Political Economy and Taxation*

**On Rent**

It remains however to be considered, whether the appropriation of land, and the consequent creation of rent, will occasion any variation in the relative value of commodities, independently of the quantity of labour necessary to production. In order to understand this part of the subject, we must enquire into the nature of rent, and the laws by which its rise or fall is regulated.

Rent is that portion of the produce of the earth, which is paid to the landlord for the use of the original and indestructible powers of the soil. It is often, however, confounded with the interest and profit of capital, and, in popular language, the term is applied to whatever is annually paid by a farmer to his landlord. If, of two adjoining farms of the same extent, and of the same natural fertility, one had all the conveniences of farming buildings, and, besides, were properly drained and manured, and advantageously divided by hedges, fences and walls, while the other had none of these advantages, more remuneration would naturally be paid for the use of one, than for the use of the other; yet in both cases this remuneration would be called rent. But it is evident, that a portion only of the money annually to be paid for the improved farm, would be given for the original and indestructible powers of the soil; the other portion would be paid for the use of the capital which had been employed in ameliorating the quality of the land, and in erecting such buildings as were necessary to secure and preserve the produce. Adam Smith sometimes speaks of rent, in the strict sense to which I am desirous of confining it, but more often in the popular sense, in which the term is usually employed. He tells us, that the demand for timber, and its consequent high price, in the more southern countries of Europe, caused a rent to be paid for forests in Norway, which could before afford no rent. Is it not, however, evident, that the person who paid what he thus calls rent, paid it in consideration of the valuable commodity which was then standing on the land, and that he actually repaid himself with a profit, by the sale of the timber? If, indeed, after the timber was removed, any compensation were paid to the landlord for the use of the land, for the purpose of growing timber or any other produce, with a view to future
demand, such compensation might justly be called rent, because it would be paid for the productive powers of the land; but in the case stated by Adam Smith, the compensation was paid for the liberty of removing and selling the timber, and not for the liberty of growing it. He speaks also of the rent of coal mines, and of stone quarries, to which the same observation applies—that the compensation given for the mine or quarry, is paid for the value of the coal or stone which can be removed from them, and has no connection with the original and indestructible powers of the land. This is a distinction of great importance, in an enquiry concerning rent and profits; for it is found, that the laws which regulate the progress of rent, are widely different from those which regulate the progress of profits, and seldom operate in the same direction. In all improved countries, that which is annually paid to the landlord, partaking of both characters, rent and profit, is sometimes kept stationary by the effects of opposing causes; at other times advances or recedes, as one or the other of these causes preponderates. In the future pages of this work, then, whenever I speak of the rent of land, I wish to be understood as speaking of that compensation, which is paid to the owner of land for the use of its original and indestructible powers.

On the first settling of a country, in which there is an abundance of rich and fertile land, a very small proportion of which is required to be cultivated for the support of the actual population, or indeed can be cultivated with the capital which the population can command, there will be no rent; for no one would pay for the use of land, when there was an abundant quantity not yet appropriated, and, therefore, at the disposal of whosoever might choose to cultivate it. On the common principles of supply and demand, no rent could be paid for such land, for the reason stated why nothing is given for the use of air and water, or for any other of the gifts of nature which exist in boundless quantity. With a given quantity of materials, and with the assistance of the pressure of the atmosphere, and the elasticity of steam, engines may perform work, and abridge human labour to a very great extent; but no charge is made for the use of these natural aids, because they are inexhaustible, and at every man's disposal. In the same manner the brewer, the distiller, the dyer, make incessant use of the air and water for the production of their commodities; but as the supply is boundless, they bear no price. If all land had the same properties, if it were unlimited in quantity, and uniform in quality, no charge could be made for its use, unless where it possessed peculiar advantages of situation. It is only, then, because land is not unlimited in quantity and uniform in quality, and because in the progress of population, land of an inferior quality, or less advantageously situated, is called into cultivation, that rent is ever paid for the use of it. When in the progress of society, land of the second degree of fertility is taken into cultivation, rent immediately commences on that of the first quality, and the amount of that rent will depend on the difference in the quality of these two portions of land.

When land of the third quality is taken into cultivation, rent immediately commences on the second, and it is regulated as before, by the difference in their productive powers. At the same time, the rent of the first quality will rise, for that must always be above the rent of the second, by the difference between the produce which they
yield with a given quantity of capital and labour. With every step in the progress of population, which shall oblige a country to have recourse to land of a worse quality, to enable it to raise its supply of food, rent, on all the more fertile land, will rise.

Thus suppose land—No. 1, 2, 3,—to yield, with an equal employment of capital and labour, a net produce of 100, 90, and 80 quarters of corn. In a new country, where there is an abundance of fertile land compared with the population, and where therefore it is only necessary to cultivate No. 1, the whole net produce will belong to the cultivator, and will be the profits of the stock which he advances. As soon as population had so far increased as to make it necessary to cultivate No. 2, from which ninety quarters only can be obtained after supporting the labourers, rent would commence on No. 1; for either there must be two rates of profit on agricultural capital, or ten quarters, or the value of ten quarters must be withdrawn from the produce of No. 1, for some other purpose. Whether the proprietor of the land, or any other person, cultivated No. 1, these ten quarters would equally constitute rent; for the cultivator of No. 2 would get the same result with his capital, whether he cultivated No. 1, paying ten quarters for rent, or continued to cultivate No. 2, paying no rent. In the same manner it might be shown that when No. 3 is brought into cultivation, the rent of No. 2 must be ten quarters, or the value of ten quarters, whilst the rent of No. 1 would rise to twenty quarters; for the cultivator of No. 3 would have the same profits whether he paid twenty quarters for the rent of No. 1, ten quarters for the rent of No. 2, or cultivated No. 3 free of all rent.

It often, and, indeed, commonly happens, that before No. 2, 3, 4, or 5, or the inferior lands are cultivated, capital can be employed more productively on those lands which are already in cultivation. It may perhaps be found, that by doubling the original capital employed on No. 1, though the produce will not be doubled, will not be increased by one hundred quarters, it may be increased by eighty-five quarters, and that this quantity exceeds what could be obtained by employing the same capital, on land No. 3.

In such case, capital will be preferably employed on the old land, and will equally create a rent; for rent is always the difference between the produce obtained by the employment of two equal quantities of capital and labour. If, with a capital of £1,000, a tenant obtain one hundred quarters of wheat from his land, and by the employment of a second capital of £1000, he obtain a further return of eighty-five, his landlord would have the power at the expiration of his lease, of obliging him to pay fifteen quarters, or an equivalent value, for additional rent; for there cannot be two rates of profit. If he is satisfied with a diminution of fifteen quarters in the return for his second £1,000, it is because no employment more profitable can be found for it. The common rate of profit would be in that proportion, and if the original tenant refused, some other person would be found willing to give all which exceeded that rate of profit to the owner of the land from which he derived it.

In this case, as well as in the other, the capital last employed pays no rent. For the greater productive powers of the first £1,000, fifteen quarters is paid for rent, for the employment of the second £1,000 no rent whatever is paid. If a third £1,000 be employed on the same land, with a return of seventy-five quarters, rent will then be paid for the second £1,000, and will be equal to the difference between the produce
of these two, or ten quarters; and at the same time the rent of the first £1,000 will rise from fifteen to twenty-five quarters; while the last £1,000 will pay no rent whatever.

If, then, good land existed in a quantity much more abundant than the production of food for an increasing population required, or if capital could be indefinitely employed without a diminished return on the old land, there could be no rise of rent; for rent invariably proceeds from the employment of an additional quantity of labour with a proportionally less return.

The most fertile, and most favorably situated, land will be first cultivated, and the exchangeable value of its produce will be adjusted in the same manner as the exchangeable value of all other commodities, by the total quantity of labour necessary in various forms, from first to last, to produce it, and bring it to market. When land of an inferior quality is taken into cultivation, the exchangeable value of raw produce will rise, because more labour is required to produce it.

The exchangeable value of all commodities, whether they be manufactured, or the produce of the mines, or the produce of land, is always regulated, not by the less quantity of labour that will suffice for their production under circumstances highly favorable, and exclusively enjoyed by those who have peculiar facilities of production; but by the greater quantity of labour necessarily bestowed on their production by those who have no such facilities; by those who continue to produce them under the most unfavorable circumstances; meaning—by the most unfavorable circumstances, the most unfavorable under which the quantity of produce required, renders it necessary to carry on the production.

Thus, in a charitable institution, where the poor are set to work with the funds of benefactors, the general prices of the commodities, which are the produce of such work, will not be governed by the peculiar facilities afforded to these workmen, but by the common, usual, and natural difficulties, which every other manufacturer will have to encounter. The manufacturer enjoying none of these facilities might indeed be driven altogether from the market, if the supply afforded by these favored workmen were equal to all the wants of the community; but if he continued the trade, it would be only on condition that he should derive from it the usual and general rate of profits on stock; and that could only happen when his commodity sold for a price proportioned to the quantity of labour bestowed on its production.

It is true, that on the best land, the same produce would still be obtained with the same labour as before, but its value would be enhanced in consequence of the diminished returns obtained by those who employed fresh labour and stock on the less fertile land. Notwithstanding, then, that the advantages of fertile over inferior lands are in no case lost, but only transferred from the cultivator, or consumer, to the landlord, yet, since more labour is required on the inferior lands, and since it is from such land only that we are enabled to furnish ourselves with the additional supply of raw produce, the comparative value of that produce will continue permanently above its former level, and make it exchange for more hats, cloth, shoes, &c. &c. in the production of which no such additional quantity of labour is required.

The reason then, why raw produce rises in comparative value, is because more labour is employed in the production of the last portion obtained, and not because a rent
is paid to the landlord. The value of corn is regulated by the quantity of labour bestowed on its production on that quality of land, or with that portion of capital, which pays no rent. Corn is not high because a rent is paid, but a rent is paid because corn is high; and it has been justly observed, that no reduction would take place in the price of corn, although landlords should forego the whole of their rent. Such a measure would only enable some farmers to live like gentlemen, but would not diminish the quantity of labour necessary to raise raw produce on the least productive land in cultivation.

Nothing is more common than to hear of the advantages which the land possesses over every other source of useful produce, on account of the surplus which it yields in the form of rent. Yet when land is most abundant, when most productive, and most fertile, it yields no rent; and it is only when its powers decay, and less is yielded in return for labour, that a share of the original produce of the more fertile portions is set apart for rent. It is singular that this quality in the land, which should have been noticed as an imperfection, compared with the natural agents by which manufacturers are assisted, should have been pointed out as constituting its peculiar pre-eminence. If air, water, the elasticity of steam, and the pressure of the atmosphere, were of various qualities; if they could be appropriated, and each quality existed only in moderate abundance, they, as well as the land, would afford a rent, as the successive qualities were brought into use. With every worse quality employed, the value of the commodities in the manufacture of which they were used, would rise, because equal quantities of labour would be less productive. Man would do more by the sweat of his brow, and nature perform less; and the land would be no longer pre-eminent for its limited powers.

If the surplus produce which land affords in the form of rent be an advantage, it is desirable that, every year, the machinery newly constructed should be less efficient than the old, as that would undoubtedly give a greater exchangeable value to the goods manufactured, not only by that machinery but by all the other machinery in the kingdom; and a rent would be paid to all those who possessed the most productive machinery.¹

¹. "In agriculture too," says Adam Smith, "nature labours along with man; and though her labour costs no expense, its produce has its value, as well as that of the most expensive workman." The labour of nature is paid, not because she does much, but because she does little. In proportion as she becomes niggardly in her gifts, she exacts a greater price for her work. Where she is munificently beneficent, she always works gratis. "The labouring cattle employed in agriculture, not only occasion, like the workmen in manufactures, the reproduction of a value equal to their own consumption, or to the capital which employs them, together with its owner's profits, but of a much greater value. Over and above the capital of the farmer and all its profits, they regularly occasion the reproduction of the rent of the landlord. This rent may be considered as the produce of those powers of nature, the use of which the landlord lends to the farmer. It is greater or smaller according to the supposed extent of those powers, or in other words, according to the supposed natural or improved fertility of the land. It is the work of nature which remains, after deducting or compensating every thing which can be regarded as the work of man. It is seldom less than a fourth, and frequently more than a third of the whole produce. No equal quantity of productive labour employed in manufactures, can ever occasion so great a reproduction. In them nature does nothing, man does all; and the reproduction must always be in proportion to the strength of the agents that occasion it. The capital employed in agriculture, therefore, not only puts into motion a greater quantity of productive labour than any equal capital employed in manufactures, but in proportion too, to the quantity of the productive labour which it employs, it adds a much greater value to the annual produce of the land and labour of the country, to the real wealth and revenue of its inhabitants. Of all the ways in which a capital can be employed, it is by far the most advantageous
The rise of rent is always the effect of the increasing wealth of the country, and of the difficulty of providing food for its augmented population. It is a symptom, but it is never a cause of wealth; for wealth often increases most rapidly while rent is either stationary, or even falling. Rent increases most rapidly, as the disposable land decreases in its productive powers. Wealth increases most rapidly in those countries where the disposable land is most fertile, where importation is least restricted, and where through agricultural improvements, productions can be multiplied without any increase in the proportional quantity of labour, and where consequently the progress of rent is slow.

If the high price of corn were the effect, and not the cause of rent, price would be proportionally influenced as rents were high or low, and rent would be a component part of price. But that corn which is produced by the greatest quantity of labour is the regulator of the price of corn; and rent does not and cannot enter in the least degree as a component part of its price. Adam Smith, therefore, cannot be correct in supposing that the original rule which regulated the exchangeable value of commodities, namely, the comparative quantity of labour by which they were produced, can be at all altered by the appropriation of land and the payment of rent. Raw material enters into the composition of most commodities, but the value of that raw material, as well as corn, is regulated by the productiveness of the portion of capital last employed on the land, and paying no rent; and therefore rent is not a component part of the price of commodities.

We have been hitherto considering the effects of the natural progress of wealth and population on rent, in a country in which the land is of variously productive powers; and we have seen, that with every portion of additional capital which it becomes necessary to employ on the land with a less productive return, rent would rise. It follows from the same principles, that any circumstances in the society which should make it unnecessary to employ the same amount of capital on the land, and which should therefore make the portion last employed more productive, would lower rent. Any great reduction in the capital of a country, which should materially diminish the funds destined for the maintenance of labour, would naturally have this effect. Population regulates itself by the funds which are to employ it, and therefore always increases or diminishes with the increase or diminution of capital. Every reduction of capital is to the society.” Book II, Ch. v., p. 15. Does nature nothing for man in manufactures? Are the powers of wind and water, which move our machinery, and assist navigation, nothing? The pressure of the atmosphere and the elasticity of steam, which enable us to work the most stupendous engines—are they not the gifts of nature? to say nothing of the effects of the matter of heat in softening and melting metals, of the decomposition of the atmosphere in the process of dyeing and fermentation. There is not a manufacture which can be mentioned, in which nature does not give her assistance to man, and give it too, generously and gratuitously. In remarking on the passage which I have copied from Adam Smith, Mr. Buchanan observes, “I have endeavoured to show, in the observations on productive and unproductive labour, contained in the fourth volume, that agriculture adds no more to the national stock than any other sort of industry. In dwelling on the reproduction of rent as so great an advantage to society, Dr. Smith does not reflect that rent is the effect of high price, and that what the landlord gains in this way, he gains at the expense of the community at large. There is no absolute gain to the society by the reproduction of rent; it is only one class profiting at the expense of another class. The notion of agriculture yielding a produce, and a rent in consequence, because nature concurs with human industry in the process of cultivation, is a mere fancy. It is not from the produce, but from the price at which the produce is sold, that the rent is derived; and this price is got not because nature assists in the production, but because it is the price which suits the consumption to the supply.”
therefore necessarily followed by a less effective demand for corn, by a fall of price, and by diminished cultivation. In the reverse order to that in which the accumulation of capital raises rent, will the diminution of it lower rent. Land of a less unproductive quality will be in succession relinquished, the exchangeable value of produce will fall, and land of a superior quality will be the land last cultivated, and that which will then pay no rent.

The same effects may however be produced, when the wealth and population of a country are increased, if that increase is accompanied by such marked improvements in agriculture, as shall have the same effect of diminishing the necessity of cultivating the poorer lands, or of expending the same amount of capital on the cultivation of the more fertile portions.

If a million of quarters of corn be necessary for the support of a given population, and it be raised on land of the qualities of No. 1, 2, 3; and if an improvement be afterwards discovered by which it can be raised on No. 1 and 2, without employing No. 3, it is evident that the immediate effect must be a fall of rent; for No. 2, instead of No. 3, will then be cultivated without paying any rent; and the rent of No. 1, instead of being the difference between the produce of No. 3 and No. 1, will be the difference only between No. 2 and 1. With the same population, and no more, there can be no demand for any additional quantity of corn; the capital and labour employed on No. 3 will be devoted to the production of other commodities desirable to the community, and can have no effect in raising rent, unless the raw material from which they are made cannot be obtained without employing capital less advantageously on the land, in which case No. 3 must again be cultivated.

It is undoubtedly true, that the fall in the relative price of raw produce, in consequence of the improvement in agriculture, or rather in consequence of less labour being bestowed on its production, would naturally lead to increased accumulation; for the profits of stock would be greatly augmented. This accumulation would lead to an increased demand for labour, to higher wages, to an increased population, to a further demand for raw produce, and to an increased cultivation. It is only, however, after the increase in the population, that rent would be as high as before; that is to say, after No. 3 was taken into cultivation. A considerable period would have elapsed, attended with a positive diminution of rent.

But improvements in agriculture are of two kinds: those which increase the productive powers of the land, and those which enable us, by improving our machinery, to obtain its produce with less labour. They both lead to a fall in the price of raw produce; they both affect rent, but they do not affect it equally. If they did not occasion a fall in the price of raw produce, they would not be improvements; for it is the essential quality of an improvement to diminish the quantity of labour before required to produce a commodity; and this diminution cannot take place without a fall of its price or relative value.

The improvements which increase the productive powers of the land, are such as the more skilful rotation of crops, or the better choice of manure. These improvements absolutely enable us to obtain the same produce from a smaller quantity of land. If, by the introduction of a course of turnips, I can feed my sheep besides raising my corn, the
land on which the sheep were before fed becomes unnecessary, and the same quantity of raw produce is raised by the employment of a less quantity of land. If I discover a manure which will enable me to make a piece of land produce 20 percent more corn, I may withdraw at least a portion of my capital from the most unproductive part of my farm. But, as I before observed, it is not necessary that land should be thrown out of cultivation, in order to reduce rent: to produce this effect, it is sufficient that successive portions of capital are employed on the same land with different results, and that the portion which gives the least result should be withdrawn. If, by the introduction of the turnip husbandry, or by the use of a more invigorating manure, I can obtain the same produce with less capital, and without disturbing the difference between the productive powers of the successive portions of capital, I shall lower rent; for a different and more productive portion will be that which will form the standard from which every other will be reckoned. If, for example, the successive portions of capital yielded 100, 90, 80, 70; whilst I employed these four portions, my rent would be 60, or the difference between

\[
\begin{align*}
70 \text{ and } 100 &= 30 \\
70 \text{ and } 90 &= 20 \\
70 \text{ and } 80 &= 10 \\
\hline
60
\end{align*}
\]

whilst the produce would be 340

\[
\begin{align*}
100 \\
90 \\
80 \\
70 \\
340
\end{align*}
\]

and while I employed these portions, the rent would remain the same, although the produce of each should have an equal augmentation. If, instead of 100, 90, 80, 70, the produce should be increased to 125, 115, 105, 95, the rent would still be 60, or the difference between

\[
\begin{align*}
95 \text{ and } 125 &= 30 \\
95 \text{ and } 125 &= 20 \\
95 \text{ and } 105 &= 10 \\
\hline
60
\end{align*}
\]

whilst the produce would be increased to 440

\[
\begin{align*}
125 \\
115 \\
105 \\
95 \\
440
\end{align*}
\]

But with such an increase of produce, without an increase of demand, there could be no motive for employing so much capital on the land; one portion would be withdrawn, and consequently the last portion of capital would yield 105 instead of 95, and rent would fall to 30, or the difference between

\[
\begin{align*}
105 \text{ and } 125 &= 30 \\
105 \text{ and } 115 &= 10 \\
\hline
30
\end{align*}
\]

whilst the produce will be still adequate to the wants of the population, for it would be 345 quarters, or

\[
\begin{align*}
125 \\
115 \\
105 \\
345
\end{align*}
\]

the demand being only for 340 quarters.—But there are improvements which may lower the relative value of produce without lowering the corn rent, though they will lower the money rent of land. Such improvements do not increase the productive powers of the land; but they enable us to obtain its produce with less labour. They are
rather directed to the formation of the capital applied to the land, than to the cultivation of the land itself. Improvements in agricultural implements, such as the plough and the thrashing machine, economy in the use of horses employed in husbandry, and a better knowledge of the veterinary art, are of this nature. Less capital, which is the same thing as less labour, will be employed on the land; but to obtain the same produce, less land cannot be cultivated. Whether improvements of this kind, however, affect corn rent, must depend on the question, whether the difference between the produce obtained by the employment of different portions of capital be increased, stationary, or diminished. If four portions of capital, 50, 60, 70, 80, be employed on the land, giving each the same results, and any improvement in the formation of such capital should enable me to withdraw 5 from each, so that they should be 45, 55, 65, and 75, no alteration would take place in the corn rent; but if the improvements were such as to enable me to make the whole saving on that portion of capital, which is least productively employed, corn rent would immediately fall, because the difference between the capital most productive, and the capital least productive, would be diminished; and it is this difference which constitutes rent.

Without multiplying instances, I hope enough has been said to show, that whatever diminishes the inequality in the produce obtained from successive portions of capital employed on the same or on new land, tends to lower rent; and that whatever increases that inequality, necessarily produces an opposite effect, and tends to raise it.

In speaking of the rent of the landlord, we have rather considered it as the proportion of the produce, obtained with a given capital on any given farm, without any reference to its exchangeable value; but since the same cause, the difficulty of production, raises the exchangeable value of raw produce, and raises also the proportion of raw produce paid to the landlord for rent, it is obvious that the landlord is doubly benefited by difficulty of production. First, he obtains a greater share, and secondly the commodity in which he is paid is of greater value.

On Natural and Market Price

In making labour the foundation of the value of commodities, and the comparative quantity of labour which is necessary to their production, the rule which determines the respective quantities of goods which shall be given in exchange for each other, we must not be supposed to deny the accidental and temporary deviations of the actual or market price of commodities from this, their primary and natural price.

In the ordinary course of events, there is no commodity which continues for any length of time to be supplied precisely in that degree of abundance, which the wants and wishes of mankind require, and therefore there is none which is not subject to accidental and temporary variations of price.

It is only in consequence of such variations, that capital is apportioned precisely, in the requisite abundance and no more, to the production of the different commodities which happen to be in demand. With the rise or fall of price, profits are elevated.
above, or depressed below their general level, and capital is either encouraged to enter into, or is warned to depart from the particular employment in which the variation has taken place.

Whilst every man is free to employ his capital where he pleases, he will naturally seek for it that employment which is most advantageous; he will naturally be dissatisfied with a profit of 10 percent, if by removing his capital he can obtain a profit of 15 percent. This restless desire on the part of all the employers of stock, to quit a less profitable for a more advantageous business, has a strong tendency to equalize the rate of profits of all, or to fix them in such proportions, as may in the estimation of the parties, compensate for any advantage which one may have, or may appear to have over the other. It is perhaps very difficult to trace the steps by which this change is effected: it is probably effected, by a manufacturer not absolutely changing his employment, but only lessening the quantity of capital he has in that employment. In all rich countries, there is a number of men forming what is called the monied class; these men are engaged in no trade, but live on the interest of their money, which is employed in discounting bills, or in loans to the more industrious part of the community. The bankers too employ a large capital on the same objects. The capital so employed forms a circulating capital of a large amount, and is employed, in larger or smaller proportions, by all the different trades of a country. There is perhaps no manufacturer, however rich, who limits his business to the extent that his own funds alone will allow: he has always some portion of this floating capital, increasing or diminishing according to the activity of the demand for his commodities. When the demand for silks increases, and that for cloth diminishes, the clothier does not remove with his capital to the silk trade, but he dismisses some of his workmen, he discontinues his demand for the loan from bankers and monied men; while the case of the silk manufacturer is the reverse: he wishes to employ more workmen, and thus his motive for borrowing is increased: he borrows more, and thus capital is transferred from one employment to another, without the necessity of a manufacturer discontinuing his usual occupation. When we look to the markets of a large town, and observe how regularly they are supplied both with home and foreign commodities, in the quantity in which they are required, under all the circumstances of varying demand, arising from the caprice of taste, or a change in the amount of population, without often producing either the effects of a glut from a too abundant supply, or an enormously high price from the supply being unequal to the demand, we must confess that the principle which apportions capital to each trade in the precise amount that it is required, is more active than is generally supposed.

A capitalist, in seeking profitable employment for his funds, will naturally take into consideration all the advantages which one occupation possesses over another. He may therefore be willing to forego a part of his money profit, in consideration of the security, cleanliness, ease, or any other real or fancied advantage which one employment may possess over another.

If from a consideration of these circumstances, the profits of stock should be so adjusted, that in one trade they were 20, in another 25, and in another 30 percent,
they would probably continue permanently with that relative difference, and with
that difference only; for if any cause should elevate the profits of one of these trades
10 percent either these profits would be temporary and would soon again fall back
to their usual station, or the profits of the others would be elevated in the same
proportion.

The present time appears to be one of the exceptions to the justness of this
remark. The termination of the war has so deranged the division which before existed
of employments in Europe, that every capitalist has not yet found his place in the new
division which has now become necessary.

Let us suppose that all commodities are at their natural price, and consequently
that the profits of capital in all employments are exactly at the same rate, or differ
only so much as, in the estimation of the parties, is equivalent to any real or fancied
advantage which they possess or forego. Suppose now that a change of fashion should
increase the demand for silks, and lessen that for woollens; their natural price, the
quantity of labour necessary to their production, would continue unaltered, but the
market price of silks would rise, and that of woollens would fall; and consequently the
profits of the silk manufacturer would be above, whilst those of the woollen manufac-
turer would be below, the general and adjusted rate of profits. Not only the profits, but
the wages of the workmen, would be affected in these employments. This increased
demand for silks would however soon be supplied, by the transference of capital and
labour from the woollen to the silk manufacture; when the market prices of silks and
woollens would again approach their natural prices, and then the usual profits would
be obtained by the respective manufacturers of those commodities.

It is then the desire, which every capitalist has, of diverting his funds from a less
to a more profitable employment, that prevents the market price of commodities from
continuing for any length of time either much above, or much below their natural
price. It is this competition which so adjusts the exchangeable value of commodities,
that after paying the wages for the labour necessary to their production, and all other
expenses required to put the capital employed in its original state of efficiency, the
remaining value or overplus will in each trade be in proportion to the value of the
capital employed.

In the 7th chap. of the Wealth of Nations, all that concerns this question is
most ably treated. Having fully acknowledged the temporary effects which, in par-
cular employments of capital, may be produced on the prices of commodities, as
well as on the wages of labour, and the profits of stock, by accidental causes,
without influencing the general price of commodities, wages, or profits, since these
effects are equally operative in all stages of society, we will leave them entirely out of
our consideration, whilst we are treating of the laws which regulate natural prices,
natural wages and natural profits, effects totally independent of these accidental
causes. In speaking then of the exchangeable value of commodities, or the power
of purchasing possessed by any one commodity, I mean always that power which it
would possess, if not disturbed by any temporary or accidental cause, and which is
its natural price.