Economics in Atlas Shrugged

RICHARD M. SALSMAN

Author's note: This essay assumes that the reader has read Atlas Shrugged; it contains many spoilers.

Economics is widely regarded today as dry, lifeless, boring. But given what economics properly studies, this should not be the case. Economics studies the production and exchange of material values in a division of labor society. We live in a material world; we produce material values in order to live and prosper; and we exchange these values for those produced by others in order to live even *better* lives. In other words, economics studies one of the major means by which people live and achieve happiness. Why, then, do so many people regard this science as boring? And what could remedy the situation?

The answers may be gleaned by comparing two books, each of which has sold millions of copies over the past five decades: Ayn Rand's *Atlas Shrugged* (1957) and Paul Samuelson's *Economics* (1948). The first is a story about the role of reason in man's life and about what happens to an economy when the men of the mind go on strike. The second is the quintessential economics text of the 20th and 21st centuries, and is generally assigned reading for beginning students in the field.¹ Although *Atlas* is a work of fiction, and although Rand was not an economist, her novel is replete with economic truths. Conversely, although *Economics* is a work of nonfiction, and although Samuelson was a Nobel-winning economist, his book is full of economic falsehoods. And whereas the truths in *Atlas* are dramatized with passion and excitement, the falsehoods in *Economics* are conveyed by way of lifeless, boring prose.²

Lest one assume that the reason *Atlas* is more exciting than *Economics* is merely a matter of the different mediums, one being fiction and the other nonfiction,

Richard Salsman is president of InterMarket Forecasting, Inc., an investment consulting firm based in Durham, N.C. He has authored two books, six chapters, and numerous articles on various aspects of banking, economics, and public policy.

observe that Rand's nonfiction—and much other nonfiction—is hands-down more exciting than many works of fiction (ever read *The Catcher in the Rye?*). Nor is people's boredom with economics due to Samuelson's book per se. But his text and those influenced by it, which represent the modern approach to the subject, have largely contributed to the way economics is taught and viewed today.

To see the difference between the modern approach to economics and that dramatized in *Atlas*, let us consider the essence of each with respect to six key areas: the source of *wealth*, the role of the *businessman*, the nature of *profit*, the essence of *competition*, the result of *production*, and the purpose of *money*.

The Source of Wealth

Samuelson and company contend that wealth results essentially from labor applied to raw materials (or "natural resources")—and by "labor" they mean physical or manual labor, not mental labor. The general idea is that the economic value of a good or service reflects the physical labor that went into making it. This is known as the "labor theory of value," and it was originally advanced by classical economists including Adam Smith, David Ricardo, and Karl Marx.³ This theory is widely accepted today, especially by the Left. In the late 19th century, however, some free-market economists, trying to counter the growing Marxist charge that labor was being robbed by greedy capitalists, amended the theory to say that "consumer desires" also determine value, jointly with labor. This approach—dubbed "neoclassical economics"—is now largely accepted and is the prevalent view in today's textbooks.

Ayn Rand, in contrast, holds that the mind—human thinking and the resulting intelligence—is the primary source of wealth. The mind, she says, directs not only physical labor but also the organization of production; "natural resources" are merely potential wealth, not actual wealth; and consumer desires are not causes of wealth but results of it.

Each great producer in *Atlas*—Hank Rearden, Dagny Taggart, Francisco D'Anconia, Ellis Wyatt, Ken Danagger, Midas Mulligan, or John Galt—is dedicated first and foremost to using his mind. Each thinks, plans long-range, and produces goods or services thereby. *Atlas* dramatizes this principle in many ways, but perhaps most vividly through the work of Rearden. In one scene he is in his steel mill looking on as the first heat of the first order of his revolutionary new metal is poured. He reflects back on the ten long years of thought and effort it took him to get to this point. He had purchased a bankrupt mill even as experts dismissed the venture and industry as hopeless. Rearden has breathed life back into both.

Rand writes that "his was a lifetime lived on the axiom that the constant, clearest most ruthless function of his rational faculty was his foremost duty" (p. 122). Here is an indication of the production process in his mill: "Two hundred tons of metal which was to be harder than steel, running liquid at a temperature of four thousand degrees, had the power to annihilate every wall of the structure and every one of the men who worked by the stream. But every inch of its course, every pound of its pressure and the content of every molecule within it, were controlled and made by a conscious intention that had worked upon it for ten years" (p. 34). Rand shows that Rearden's mind is the source of this wealth, and that labor and materials had stood idle until his mind showed up for work.

Others in Atlas voice the textbook view of the entrepreneur. Rearden's wife dismisses his achievements: "Intellectual pursuits are not learned in the marketplace," she scowls; "it's easier to pour a ton of steel than it is to make friends" (p. 138). A hobo in a diner accosts Dagny Taggart with a similar attitude: "Man is just a low-grade animal, without intellect," he growls; "[his] only talent is an ignoble cunning for satisfying the needs of his body. No intelligence is required for that. . . . [W]itness our great industries—the only accomplishments of our alleged civilization—built by vulgar materialists with the aims, the interests and the moral sense of hogs" (p. 168). Perhaps an economist might recognize the nature of Rearden's achievement? As the metal is poured a train passes by the mills, and inside, a professor of economics asks a companion, "Of what importance is an individual in the titanic collective achievements of our industrial age?" (p. 33). The "importance" is happening just outside his window, but he doesn't see it, conceptually speaking. Nor do others. "The passengers paid no attention; one more heat of steel being poured was not an event they had been taught to notice" (p. 33). Professors such as this one had taught them not to notice.

Such scenes illustrate how intelligence creates wealth, how business success entails a long-range process of thought and planning carried out by a focused individual—and how little this is understood.

Yet Dagny understands—as is evident in the scene where she takes her first run on the John Galt Line, traveling on a track and over a bridge made of that as-yet untried Rearden Metal, at unprecedented speeds. Riding in the front cab with Rearden and Pat Logan, the engineer, Dagny thinks: "Who made it possible for four dials and three levers in front of Pat Logan to hold the incredible power of the sixteen motors behind them and deliver it to the effortless control of one man's hand?" (p. 226). "To take the pounding violence of

sixteen motors, she thought, the thrust of seven thousand tons of steel and freight, to withstand it, grip it and swing it around a curve, was the impossible feat performed by two strips of metal no wider than her arm. What made it possible? What power had given to an unseen arrangement of molecules the power on which their lives depended and the lives of all the men who waited for the eighty boxcars? She saw a man's face and hands in the glow of a laboratory oven, over the white liquid of a sample of metal" (p. 230). The man of course, is Rearden. His reasoning mind, not his manual labor, was the fundamental factor shaping and controlling nature to suit human needs.

Unlike the economics professor, Dagny notices—and comprehends. She asks and answers questions that never occur to the scholar. "Why had she always felt that joyous sense of confidence when looking at machines? . . . They are alive, she thought, because they are the physical shape of the action of a living power—of the mind that had been able to grasp the whole of this complexity, to set its purpose, to give it form. . . . [I]t seemed to her that the motors were transparent and she was seeing the net of their nervous system. It was a net of connections, more intricate, more crucial than all of their wires and circuits: the rational connections made by that human mind which had fashioned any one part of them for the first time. They *are* alive, she thought, but their soul operates by remote control" (pp. 230–31).

Machines function, ultimately, because of the minds of their creators, not the muscles of their operators. The powerful mind creates machines to extend and amplify the power of otherwise meager muscles. As John Galt conveys the point, machines are "a frozen form of a living intelligence" (p. 979).4

Atlas illustrates this principle repeatedly, both in the plot and in the dialogue. "Have you ever looked for the root of production," Francisco asks indifferent onlookers at a party. "Take a look at an electric generator and dare tell yourself it was created by the muscular effort of unthinking brutes. . . . Try to obtain your food by means of nothing but physical motions—and you'll learn that man's mind is the root of all the goods produced and of all the wealth that has ever existed on earth" (p. 383). Philosopher Hugh Akston tells Dagny, "All work is an act of philosophy. . . . The source of work? Man's mind, Miss Taggart, man's reasoning mind" (p. 681). Composer Richard Halley tells her: "Whether it's a symphony or a coal mine, all work is an act of creating and comes from the same source: from an inviolate capacity to see through one's own eyes—which means: the capacity to perform a rational identification—which means: the

capacity to see, to connect and to make what had not been seen, connected and made before" (p. 722).

When Dagny sees Galt's powerhouse in the valley, we again have the metaphor of electrical wiring and conceptual connections: Dagny thinks of "the energy of a single mind who had known how to make connections of wire follow the connections of his thought" (p. 674). Galt later gives deeper meaning to the link: "As you cannot have effects without causes, so you cannot have wealth without its source: without intelligence" (p. 977).

The textbook myth that wealth can be had apart from intelligence is dramatized when the state seizes Rearden Metal for the alleged public good. It is renamed "Miracle Metal" and henceforth will be made by whoever wishes to make it (p. 519). Rearden imagines the parasites struggling to handle his creation. "[H]e was seeing them go through the jerky motions of an ape performing a routine it had learned to copy by muscular habit, performing it in order to manufacture Rearden Metal, with no knowledge and no capacity to know what had taken place in the experimental laboratory through ten years of passionate devotion to an excruciating effort. It was proper that they should now call it 'Miracle Metal'—a miracle was the only name they could give to those ten years and to that faculty from which Rearden Metal was born—the product of an unknown, unknowable cause . . ." (p. 519).

Recall the banker in *Atlas*, born Michael Mulligan, who is also the richest man in the country. A newspaper says his investing prowess is akin to the mythical King Midas, for everything he touches turns to gold. "It's because I know what to touch," says Mulligan. Liking the name Midas, he adopts it. An economist derides him as a mere gambler. Mulligan replies: "The reason why you'll never get rich is because you think what I do is gambling" (p. 295).

Rand shows that what Mulligan and the other producers do is not gambling but observing reality, integrating, calculating, in a word: thinking.

Many economics textbooks insist that wealth can be had by force, through "monopoly power" or mandates or "stimulative" public policies. But *Atlas* shows that force, by negating the mind, negates wealth creation.

Recall that an armory of statist controls is imposed on production, the most invasive control being Directive 10-289, which aims to freeze all market choices and activities, so the economy can "recover." Francisco calls the Directive "the moratorium on brains," and, when it passes, Dagny quits, refusing to work as a slave or slave driver. Likewise, upon learning the Equalization of Opportunity Bill has passed, Rearden introspects: "Thought—he told himself quietly—is a

weapon one uses in order to act. No action was possible. Thought is the tool by which one makes a choice. No choice was left to him. Thought sets one's purpose and the way to reach it. In the matter of his life being torn piece by piece from him, he was to have no voice, no purpose, no way, no defense" (p. 202). He too quits.

Galt later explains: "You cannot force intelligence to work: those who're able to think will not work under compulsion; those who will, won't produce much more than the price of the whip needed to keep them enslaved" (p. 977). Shortly thereafter, thugs capture Galt and try to conscript him to be the economic dictator. They view him as "the greatest economic organizer, the most gifted administrator, the most brilliant planner," and they seek to force him to use his abilities to save the country from ruin (p. 1033). Finally forced to speak, Galt asks what plans they think he should issue. They are speechless.

The textbook view that an economy devoid of thinking men works just fine is voiced by Ben Nealy, a construction contractor who shouts, "Muscles, Miss Taggart . . . muscles—that's all it takes to build anything in the world" (p. 154). Dagny looks out over a canyon and a dry river bed filled with boulders and tree trunks: "She wondered whether boulders, tree trunks and muscles could ever bridge that canyon. She wondered why she found herself thinking suddenly that cave-dwellers had lived naked on the bottom of that canyon for ages" (p. 155). Later, during her ride on the John Galt Line, she reflects that if intelligence were to vanish from the earth, "the motors would stop, because that is the power which keeps them going—not the oil under the floor under her feet, the oil that would then become primeval ooze again—not the steel cylinders that would become stains of rust on the walls of the caves of shivering savages—the power of a living mind—the power of thought and choice and purpose" (p. 231).

What does mindless labor look like? Later in the story, when certain track-signal switches fail, Dagny visits the relay room and sees manual laborers standing with shelves of intricate wires and levers surrounding them—"an enormous complexity of thought" that enabled "one movement of a human hand to set and insure the course of a train." But now the system is inoperative, and no trains may enter or leave the Taggart terminal. "[The laborers] believed that the muscular contraction of a hand was the only thing required to move the traffic—and now the tower men stood idle—and on the great panels in front of the tower director, the red and green lights, which had flashed announcing the progress of trains at a distance of miles, were now so many glass beads—like the glass beads for which another breed of savages had once sold the Island of Manhattan. 'Call

all of your unskilled laborers," Dagny says. "We're going to move trains and we're going to move them manually. 'Manually?" says the signal engineer. "Yes, brother! Now why should you be shocked? . . . Man is only muscles, isn't he? We're going back—back to where there were no interlocking systems, no semaphores, no electricity—back to the time when train signals were not steel and wire, but men holding lanterns. Physical men, serving as lamposts. You've advocated it long enough—you've got what you wanted" (pp. 875–76).

The principle is further dramatized when political looters seize Ellis Wyatt's oil fields, Dagny's railroad, Rearden's steel mills, Francisco's copper mines, and Ken Danagger's coal mines. The looters can't make the properties produce as they once did. We see that it takes thinking to *maintain* complex systems of wealth just as it does to create them. In his speech, Galt addresses the textbook writers: "[L]et the cannibal who snarls that the freedom of man's mind was needed to *create* an industrial civilization, but is not needed to *maintain* it, be given an arrowhead and bearskin, not a university chair in economics" (p. 957).

When the producers' machinery is divorced from their intelligence and left to the ignorance and whims of the mindless, the result is decay and destruction. When Taggart Transcontinental is left to the incompetent and evasive James Taggart—who amid emergencies is fond of screaming that men can't afford the "luxury of thinking" and don't have time to "theorize about causes" or the future—the company begins to collapse. A highly dramatic account of the principle is the Winston Tunnel disaster, in which a coal-operated, smoke-belching railroad engine is sent through the tunnel to satisfy bureaucratic dictates, and everyone on board dies. Everyone involved in the mindless decision abdicates responsibility. When James Taggart hears of it, he evades its meaning: "It was as if he were immersed in a pool of fog, struggling not to let it [the disaster] reach the finality of any form. That which exists possesses identity; he could keep it out of existence by refusing to identify it. He did not examine the events in Colorado; he did not attempt to grasp their cause, he did not consider their consequences. He did not think" (pp. 576–77).

One victim (and perpetrator) of the disaster was "the man in Roomette 2, Car No. 9"—"a professor of economics who advocated the abolition of private property, explaining that intelligence plays no part in industrial production, that man's mind is conditioned by material tools, that anybody can run a factory or a railroad and it's only a matter of seizing the machinery" (p. 561).

Whereas modern economists regard wealth as caused by physical labor or by consumer desires or by government coercion, Ayn Rand dramatizes the fact that wealth is a product of the mind—which cannot function under coercion.

The Role of the Businessman

Modern economists portray the businessman as moved by "exogenous" forces, those outside of himself, and thus as inconsequential to wealth creation⁵—or by instinct, the so-called "animal spirits," entailing bouts of undue optimism or excessive pessimism⁶—or by the desires of the consumer, as in, "the consumer is king." In all these accounts, the businessman is driven not by his own choices or his own vision of what is possible but by forces beyond his rational control. 8

Atlas, on the other hand, shows the businessman not as beholden to historical forces, instincts, or consumer wishes, but as an autonomous, self-directed, rational being dedicated to the production of values that will enhance human life and thus be embraced by consumers regardless of their prior desires. Atlas depicts the businessman as the prime mover in markets, the "first cause" of production, and the shaper of consumer desires. (Observe that no one desired Rearden Steel—or could have desired it—until Rearden created it.) And she shows that when the businessman is hog-tied by regulations, production stagnates or stops—further proof that he is the prime mover.

Consider some of Rand's colorful characterizations, each fully integrated with the unfolding plot. At age fourteen Rearden is working in the iron mines of Minnesota; by thirty he owns them. In one scene he reflects on his early struggles in developing his new metal: "It was late and his staff had left, so he could lie there alone, unwitnessed. He was tired. It was as if he had run a race against his own body, and all the exhaustion of years, which he had refused to acknowledge, had caught him at once and flattened him against the desk top. He felt nothing, except the desire not to move. He did not have the strength to feel—not even to suffer. He had burned everything there was to burn within him; he had scattered so many sparks to start so many things—and he wondered whether someone could give him now the spark he needed, now when he felt unable ever to rise again. He asked himself who had started him and kept him going. Then he raised his head. Slowly, with the greatest effort of his life, he made his body rise until he was able to sit upright with only one hand pressed to the desk and a trembling arm to support him. He never asked that question again" (p. 36). Here is a portrait of the unmoved mover, whose starting point is the choice to think, to act, to

live. There is nothing prior, no historical forces, no instincts or so-called intestinal fortitude—and no consumer opinion surveys.⁹

Likewise for the founders of Taggart Transcontinental and d'Anconia Copper. Nathaniel Taggart was a penniless adventurer who built a railroad across a continent in the days of the first steel rails. "He was a man who had never accepted the creed that others had a right to stop him. He set his goal and moved toward it, his way as straight as one of his rails" (p. 62). He obtained financing by giving investors good reasons why they would make big profits. They did. He never sought help from government; when he was most desperate for funds "he pledged his wife as security for a loan from a millionaire who hated him and admired her beauty" (p. 63). He repaid the loan. He built the Taggart Bridge across the Mississippi in Illinois, linking East and West, after fighting bureaucrats and shipping competitors for years. At a key juncture in the project he was broke and nearly beaten. The papers printed scare stories about the bridge's safety. Steamboat companies sued him. A local mob sabotaged parts of the bridge. The banks said they would loan him money, but only on the condition that he give up the bridge and use barges to ferry his traffic across the river instead. "What was his answer?—they asked. He did not say a word, he picked up the contract, tore it across, handed it to them, and walked out. He walked to the bridge, along the spans, down to the last girder. He knelt, he picked up the tools his men had left, and he started to clear the charred wreckage away from the steel structure. His chief engineer saw him there, axe in hand, alone over the wide river, with the sun setting behind him in the west where his line was to go. He worked there all night. By morning he had thought out a plan of what he would do to find the right men, the men of independent judgment—to find them, to convince them, to raise the money, to continue the bridge" (p. 477).

Centuries earlier, Sebastian d'Anconia had left his fortune, his estate, his marble palace, and the girl he loved in Spain. He left because the lord of the Inquisition "did not approve of his manner of thinking and suggested he change it." His answer? "D'Anconia threw the contents of his wine glass at his accuser's face and escaped before he could be seized." Then, from a wooden shack in the foothills of Argentina, he dug for copper. With the help of some stray derelicts, he spent years wielding a pickax and breaking rock from sunrise till darkness. Fifteen years after leaving Spain he sent for the girl he loved and carried her over the threshold of a great mountain estate overlooking his copper mines (p. 90).

Francisco d'Anconia is the son of a multimillionaire, but at age twelve while staying at the Taggart estate he ran off during the day to work on the railroad,

skirting child labor laws. "Two things were impossible to him: to stand still or to move aimlessly" (p. 93). While studying in his university he bought a rundown copper foundry with money earned in the stock market. Asked by his father why, Francisco responded, "I like to learn things for myself." Who taught him to invest? "It is not difficult to judge which industrial ventures will succeed and which won't" (p. 107).

Dagny Taggart is another prime mover. "Through the years of her childhood, Dagny lived in the future—in the world she expected to find, where she would not have to feel contempt or boredom" (p. 90). At age nine she vowed to run Taggart Transcontinental someday. "She was fifteen when it occurred to her for the first time that women didn't run railroads and that people might object. To hell with that, she thought—and never worried about it again" (pp. 54-55). At age sixteen, expecting no nepotism, she starts at Taggart Transcontinental in a remote station as an operator. For Dagny, "Her work was all she had or wanted. . . . She had always been . . . the motive power of her own happiness" (p. 67). Since her childhood, "She felt the excitement of solving problems, the insolent delight of taking up a challenge and disposing of it without effort, the eagerness to meet another, harder test" (p. 54). When Dagny's assistant, Eddie Willers, was in her presence, "he felt as he did in his car when the motor caught on and the wheels could move forward" (p. 30).

No one in senior management at Taggart supports Dagny's idea to build a new line using Rearden Metal, so she does it herself, under a new company, naming it the John Galt Line in defiance of the hopeless despair evoked by the phrase "Who is John Galt?" She works from a basement office while Taggart executives denounce the line publicly. She perseveres, gets financing, and ultimately builds the line and the bridge it requires. Later she speaks of her "single absolute: that the world was mine to shape in the image of my highest values and never to be given up to a lesser standard, no matter how long or hard the struggle" (p. 749). Such is the moral posture of a prime mover.

Yet another prime mover is Ellis Wyatt, the first entrepreneur to begin producing oil from shale rock. Rand describes him as "a newcomer whom people were beginning to watch, because his activity was the first trickle of a torrent of goods about to burst from the dying stretches of Colorado" (p. 58). "Who was it that said he needed a fulcrum?" he asks Dagny. "Give me an unobstructed right-of-way and I'll show them how to move the earth!" (p. 234).

Finally, there is John Galt himself. Son of a gas station mechanic, he leaves home at age twelve and, in time, invents a revolutionary new motor. "An inventor," he

says later, "is a man who asks 'Why?' of the universe and lets nothing stand between the answer and his mind" (p. 963).

Rand depicts the prime movers as independent, rational, purposeful, and persistent. She shows them to be lovers of life and of the work that supports it. And she shows them to be men of integrity and courage. After the Taggart Board forces Dagny to dismantle her John Galt Line, Francisco tells her: "Look around you. A city is the frozen shape of human courage—the courage of those men who thought for the first time of every bolt, rivet and power generator that went to make it. The courage to say, not 'It seems to me,' but 'It is'—and to stake one's life on one's judgment" (pp. 475–76).

Whereas modern economics texts and courses attempt to strip the subject of morality and make it "value-free," Atlas demonstrates that the producers are in fact value-driven through and through—and that their work is precisely and profoundly moral. Recall when Francisco tells Rearden, "Any man can be stopped," and Rearden asks how. "It's only a matter of knowing man's motive power," says Francisco. Rearden asks, "What is it?" and Francisco replies, "You ought to know . . . you're one of the last moral men left to the world." At this point Rearden does not see how morality relates to his love of work. Pointing to Rearden's mills, Francisco says, "If you want to see an abstract principle, such as moral action, in material form, there it is . . . Every girder of it, every pipe, wire and valve was put there by a choice in answer to a question: right or wrong? You had to choose right and you had to choose the best within your knowledge . . . and then move on and extend the knowledge and do better, and still better, with your purpose as your standard of value. You had to act on your judgment . . . Millions of men, an entire nation, were not able to deter you from producing Rearden Metal-because you had the knowledge of its superlative value and the power which such knowledge gives" (p. 420). "Your own moral code . . . was the code that preserves man's existence. . . . Yours was the code of life. . . . Man's motive power is his moral code" (p. 423). Atlas dramatizes the integration of is and ought, showing how both facts and values are indispensable to the prime movers and to wealth creation.

Of course, *Atlas* does *not* depict *every* businessman as a prime mover. In the novel, as in real life, there are mediocrities, incompetents, and secondhanders, and the contrast helps sharpen the picture we have of the genuine prime mover. For example, Mr. Ward of the Ward Harvester Company is not a prime mover. He heads "an unpretentious company with an unblemished reputation, the kind of business concern that seldom grows large, but never fails" (p. 197). The business had been started four generations ago and has been handed down to com-

pany man after company man, none of whom ever brought a new idea to the table. Like his forebears, Mr. Ward cherishes precedent above all; he speaks of his traditional ties to suppliers and does not want to upset them by switching to Rearden Metal, despite its clear superiority. Mr. Ward places people before principles.

Paul Larkin is another example of a man who does business but is not a prime mover. "Nothing he touched ever came off quite well, nothing ever quite succeeded. He was a businessman, but he could not manage to remain for long in any one line of business." Although Larkin was acquainted with Rearden, the link resembled "the need of an anemic person who receives a kind of living transfusion from the mere sight of a savagely overabundant vitality." In contrast, "Watching Larkin's efforts, Rearden felt what he did when he watched an ant struggling under the load of a matchstick" (p. 44). Contrast this image to the one that Rand's novel conveys broadly: that of the Greek god *Atlas* holding up the world on his shoulders. Rearden is *Atlas*—as against Larkin, an ant.

Whereas Ward and Larkin are pathetic but innocuous, others in *Atlas* inflict real damage when they "do business" or substitute for the prime movers. Clifton Locey replaces Dagny after she quits. Eddie Willers refers to Locey as a "trained seal," and says Locey "makes it a point to change everything she used to do in every respect that doesn't matter, but he's damn cautious not to change anything that matters. The only trouble is that he can't always tell which is which" (pp. 526–27). (Locey, recall, sends the Comet through the Winston Tunnel.)

There are also the fly-by-nights, parasites, and industrial vultures who try to ride on the heroes' brains and scoop up the looted remnants of their past creations. Galt describes them as those who "seek, not to build, but to *take over* industrial plants" on the premise that "the only requirement for running a factory is the ability to turn the cranks of the machine, and blank out the question of who created the factory" (pp. 955–56). This "new biological species, the hit-and-run businessman . . . hovered over factories, waiting for the last breath of a furnace, to pounce upon the equipment" (p. 913).

Recall Amalgamated Service Corp., which buys failed firms for a nickel on the dollar and sells its pieces for a dime. This company is headed by Lee Hunsacker, the first part of whose name, "Hun," implies the barbaric Asian nomads who raided Europe in the 5th century—and the last part, "sacker," a savage who pillages a once-great city such as Rome.

The independence and benevolence of the prime movers in *Atlas* sometimes makes them prone to erroneous overconfidence—at least in their power

to avoid destruction by enemies. Recall Dagny's attitude toward her brother, Jim: "[S]he had the conviction that he was not smart enough to harm the rail-road too much and that she would always be able to correct whatever damage he caused" (p. 55). Likewise, Rearden laughs off the warning of a friend about an impending looter: "[W]hat do we care about people like him? We're driving an express, and they're riding on the roof, making a lot of noise about being leaders. Why should we care? We have enough power to carry them along—haven't we?" (p. 227). *Atlas* shows that, indeed, the prime movers do not have such power—at least not when reason is *out* and force is *in*.

Atlas repeatedly shows that coercion negates the efficacy of the prime movers—because it negates the fundamental tool that moves them: their mind. Recall for instance, when Rearden meets with copper producers who had just been "garroted by a set of directives." "He had no advice to give them, no solution to offer; his ingenuity, which had made him famous as the man who would always find a way to keep production going, had been unable to discover a way to save them. But they had all known that there was no way; ingenuity was a virtue of the mind—and in the issue confronting them, the mind had been discarded as irrelevant long ago" (p. 349).

The looters, however, fail to see the relevant connections. When James Taggart tells Dagny she must find a way to make things work, regardless of the controls, she thinks of "savages who, seeing a farmer gather a harvest, can consider it only as a mystic phenomenon unbound by the law of causality and created by the farmers' omnipotent whim, who then proceed to seize the farmer, to chain him, to deprive him of tools, of seeds, of water, of soil, to push him out on a barren rock and to command: 'Now grow a harvest and feed us!'" (p. 843).

Likewise, near the end of the story, Rearden tells the looters they cannot possibly survive by their plans. Dr. Ferris replies, "You won't go bankrupt. You'll always produce." He says it indifferently, "neither in praise nor in blame, merely in the tone of stating a fact of nature, as he would have said to another man: 'You'll always be a bum. You can't help it. It's in your blood. Or, to be more scientific: you're conditioned that way'" (pp. 905–6). Rearden realizes such evil requires his own sanction; but he will no longer grant it. (Ferris later tortures Galt.)

The villains in *Atlas* embrace every fallacy concerning the role of the business-man—from "the businessman is irrelevant" to "the businessman is driven by consumer desires" to "the businessman will always produce" to "the businessman can and must be forced to produce" to "the businessman exploits workers by forcing them to produce for him." Throughout *Atlas* dramatically—and in Galt's speech

directly—such errors are exposed and the truth is revealed: "We are useless, according to your economics. We have chosen not to exploit you any longer" (p. 929). But, in fact, "We are *the cause* of all the values you covet. . . . [Without us] you would not be able to desire the clothes that had not been made, the automobile that had not been invented, the money that had not been devised, as exchange for goods that did not exist . . ."(p. 1038).

In *Atlas*, Rand provides a vivid depiction of the businessman as prime mover who makes markets, profit, and consumption possible—and who functions only by choice and reason.

The Nature of Profit

Modern economists generally hold that profit arises either (a) from businessmen exploiting their employees, working them to the bone, underpaying them for their productive activities, and retaining the earnings that should have gone to the workers who "really" created the goods; (b) from businessmen engaging in "monopolistic" activity in which one or a few businesses own a scarce resource, say, oil, and thus are able to charge a higher price for it than would be possible if it were owned in common; or (c) a combination of (a) and (b). Businessmen, in this view, profit not by producing values that people then want to buy, but by robbing employees or bilking customers or both. Alternatively, some modern economists take the "conservative" view that profit results from businessmen taking "risks" (wild guesses) about—or having faith in—the future desires of consumers.¹⁰

In sum, modern economists hold that profit arises from *force* or *faith*—either as value extracted from laborers and consumers against their will, or from gambling on the future. Either way, say these economists, businessmen do not really *earn* profit: They make a quick buck at someone else's expense or they make it by sheer luck. Thus, their profit is *undeserved*, and some degree of government taxation and/or regulation is necessary to rectify the injustice.

Atlas shows the opposite to be the case. To appreciate what Rand achieves in this respect, an analogy is helpful. Just as a detective seeking a murderer and the cause of death must look for someone who had the means, motive, and opportunity to commit the murder, so an economist seeking a producer and the cause of profit must look for someone with the means, motive, and opportunity to produce profit. The means here, according to Rand, is the rational mind; the motive is self-interest; the opportunity is political freedom. Each must be present for

profit to arise—and each requirement is dramatized in *Atlas*. Let us consider them in turn.

In regard to the basic *means* of profit—the mind—we see in *Atlas* that profits are created by rational men thinking, producing, and trading with other rational men. We also see that some men operate at very high levels of abstraction—planning decades into the future, managing countless parts of a huge whole, integrating, calculating, projecting, directing—whereas other men operate at lower levels of abstraction, whether managing a department, making sales calls, conducting a train, operating a furnace, or sweeping floors. Rand called this particular hierarchy *the pyramid of ability*, and she dramatized it in myriad ways throughout *Atlas*. Consider just a few.

In one scene, after Ben Nealy tells Dagny that "muscles" are all it takes to build anything, Ellis Wyatt arrives and tells Nealy's men that they had better move their supplies to avoid a rock slide—then, he tells them to protect the water tank from freezing at night—next, to check on a wiring system that is showing defects—and finally, that they will need a new ditcher. Nealy scowls that Wyatt is a "snooty show-off" who keeps "hanging around as if nobody knew their business but him." Dagny then must spend two exhausting hours explaining basic procedures to Nealy, and she insists that he have someone there taking notes (p. 158). Later, Dagny meets with Rearden to discuss some of the complexities of the bridge they will build. He shows her his notebooks, some notations, a few rough sketches. "His voice sounded sharp and clear, while he explained thrusts, pulls, loads and wind pressures"; Dagny "understood his scheme before he had finished explaining it" (p. 160). We see clearly that some men operate at higher intellectual levels than others. Some think wide-range and long-range, planning for countless possibilities and contingencies in the present and into the distant future; others think and plan to a lesser degree; and still others do little or no thinking or planning but just show up for work and do what they are told.

In another scene, Rearden recalls his early struggles and "the days when the young scientists of the small staff he had chosen to assist him waited for instructions like soldiers ready for a hopeless battle, having exhausted their ingenuity, still willing, but silent, with the unspoken sentence hanging in the air: 'Mr. Rearden, it can't be done" (p. 35). Later, Rearden's brother, Philip, ridicules his success: "He didn't dig that ore single-handed, did he? He had to employ hundreds of workers. They did it. Why does he think he's so good?" (p. 130). Philip is oblivious to the fact that even Rearden's highly intelligent scientists require his still higher-level guidance.

In another scene, when Dagny receives no support from the Board to build the Rio Norte Line and decides to create the John Galt Line, Rearden asks her about her labor supply. She replies that she has more applicants than she can hire. When a union leader says he will block his men from working for her, she replies, "If you think I need your men more than they need me, choose accordingly. . . . If you choose not to let them, the train will still run, if I have to drive the engine myself. . . . If you know that I can run an engine but they can't build a railroad, choose according to that" (p. 217). She issues a job notice for just one engineer to steer the first train on what everyone says will be a disaster. She arrives at her office. "Men stood jammed among the desks, against the walls. As she entered they took their hats off in sudden silence" (p. 218).

Those at the top of the pyramid are fewer in number, but they can do the jobs of those at the bottom; those below are many more—but cannot do the top jobs. In *Atlas*, as in real life, the rank and file seem to recognize this better than union bosses.

The pyramid of ability is also dramatized when the men of intelligence quit to assume manual labor jobs and are replaced by men of lesser ability who cannot preserve previous profits or even basic output. In the scene where Francisco tells Rearden not to sanction his destroyers, an alarm bell rings because one of Rearden's furnaces has split apart. The two men leap into action and skillfully contain the damage (p. 425).

Successful, profitable businesses, Rand demonstrates in Atlas, arise from and depend on the men of the mind. As Galt says in his speech, "Physical labor as such can extend no further than the range of the moment. The man who does no more than physical labor, consumes the material value-equivalent of his own contribution to the process of production, and leaves no further value, neither for himself nor others. But the man who produces an idea in any field of rational endeavor—the man who discovers new knowledge—is the permanent benefactor of humanity. Material products can't be shared, they belong to some ultimate consumer; it is only the value of an idea that can be shared with unlimited numbers of men, making all sharers richer at no one's sacrifice or loss, raising the productive capacity of whatever labor they perform. . . .

"In proportion to the mental energy he spent, the man who creates a new invention receives but a small percentage of his value in terms of material payment, no matter what fortune he makes, no matter what millions he earns. But the man who works as a janitor in the factory producing that invention, receives an enormous payment in proportion to the mental effort that his job requires of

him. And the same is true of all men between, on all levels of ambition and ability. The man at the top of the intellectual pyramid contributes the most to all those below him, but gets nothing but his material payment, receiving no intellectual bonus from others to add to the value of his time. The man at the bottom who, left to himself, would starve in his hopeless ineptitude, contributes nothing to those above him, but receives the bonus of all their brains" (pp. 979–80).

In a free society, says Francisco, with reason as the final arbiter, "the degree of a man's productiveness is the degree of his reward," and the most productive man "is the man of best judgment and highest ability" (p. 383). Later, in explaining the strike, Galt tells Dagny that now "we take nothing but the lowliest jobs and we produce, by the efforts of our muscles, no more than we consume for our immediate needs—with not a penny or an inventive thought left over . . ."(p. 684).

From these and other passages, as well as the surrounding drama in *Atlas*, we see that business success and profit arise not from physical labor or force or faith or luck—but from rational, long-range thinking and correspondingly calculated decision making.

As to the necessarily selfish *motive* behind the creation of profit, Rand dramatizes this repeatedly throughout the novel as well. Consider, for instance, the negotiations between Dagny and Rearden regarding the Rio Norte Line. Each is clear about his intentions: Dagny wants the Line built with Rearden Metal; Rearden knows this and charges her a steep price; he could have asked for double, he tells her. She concedes it, but reminds him that he wants to showcase his metal—and that this line is his best means of doing so. "So you think it's right that I should squeeze every penny of profit I can, out of your emergency?" he asks. "Certainly," says Dagny. "I'm not a fool. I don't think you're in business for my convenience . . . I'm not a moocher" (p. 84).

A particularly colorful drama is the press conference in which Dagny and Hank boldly state their interest in profiting handsomely from the John Galt Line (p. 220). Dagny says railroads typically earn 2 percent on investment; a company should consider itself immoral, she says, to earn so little for providing so much. She expects to earn at least 15 percent, but she'll try hard for 20 percent. The press is aghast. They invite her to amend her comments with altruistic justifications. She declines, saying it is too bad she does not own more Taggart stock, so she can make even more profit. Rearden informs the press that his metal costs far less to produce than they think, and that he expects "to skin the public to the tune of 25 percent in the next few years." A reporter asks: "If it's true, as I've read in your ads, that your Metal will last three times longer than any other metal and at half the

price, wouldn't the public be getting a bargain?" "Oh, have you noticed that?" answers Rearden (p. 220). (As here, Rand cleverly demonstrates throughout the novel that what is in one man's rational self-interest is in the rational self-interest of others as well.)

The role of selfish motive is further dramatized by the surface difference between Rearden and Francisco, both of whom are highly intelligent. Francisco asks Rearden why he spent ten years making his metal. To make money, Rearden answers. Francisco reminds him there are many easier ways to make money and asks why he chose the hardest. Rearden replies that Francisco himself had earlier given the answer: "in order to exchange my best effort for the best effort of others" (p. 421).

Making the same point in negative form, Francisco tells Dagny, "They thought it was safe to ride on my brain, because they assumed that the goal of my journey was wealth. All their calculations rested on the premise that I wanted to make money. What if I didn't?" (p. 117). Later, at Rearden's house, Francisco asks, "Isn't it generally agreed that an owner is a parasite and an exploiter, that it is the employees who do all the work and make the product possible? I did not exploit anyone. I did not burden the San Sebastian mines with my useless presence; I left them in the hands of the men who count"—men, Francisco had noted earlier, "who could not have achieved in a lifetime, the equivalent of what they got for one day's work, which they could not do" (p. 137).

These and other scenes show that intelligence is not sufficient for profit; a selfish motive is indispensable, too.

The stereotypical view that businessmen driven by the profit motive seek to make short-term gains at the expense of others is fully exposed as myth in *Atlas*. Recall that Dr. Potter of the State Science Institute offers Rearden a fortune (to be paid with taxpayer money) for exclusive rights to his metal, which Potter wants to use in Project X. He tells Rearden he will relieve him of his risks and give him an enormous profit *immediately*, but Rearden refuses. "You want to make as big a profit as possible, don't you?" Rearden says he does. "Then why do you want to struggle for years, squeezing out your gains in the form of pennies per ton—rather than accept a fortune for Rearden Metal?" Potter asks. "Because it's *mine*," says Rearden. "Do you understand the word?" (p. 172). After being shown the door, Potter asks, "just between us . . . why are you doing this?" Rearden says, "I'll tell you. You won't understand. You see, it's because Rearden Metal is *good*" (p. 173). Potter does not understand either word.

As Dagny's John Galt Line is ridiculed as "unsafe," a critic says the Taggarts have been "a band of vultures" who "won't hesitate to risk people's lives in or-

der to make a profit. . . . [W]hat do they care about catastrophes and mangled bodies, after they've collected the fares?" (p. 214). Yet Dagny runs a perfectly safe line, and later it is her replacement, the mindless Clifton Locey, who sends the smoke-belching engine into the Winston Tunnel, killing hundreds—and it is James Taggart who uses political power to crush competitors, suspend bond payments, and nationalize d'Anconia Copper. Jim tries to make a quick killing by shorting its stock while buying into the state company that will seize the assets. And he taunts Dagny: "You have always considered money-making as such an important virtue," he says. "Well, it seems to me that I'm better at it than you are" (p. 329).

Critics call Rearden a "greedy monster" and say "[he'll] do anything for money." "What does he care if people lose their lives when his bridge collapses?" (p. 214). Yet Rearden is put on trial, not for taking that "risk" but for refusing to allow his metal to be used by the state for Project X. "It is my moral responsibility to know for what purpose I permit [my metal] to be used," he says. "[T]here can be no justification for a society in which a man is expected to manufacture the weapons for his own murderers" (p. 341). During the trial, defective steel girders collapse at a housing project, killing four workmen. The girders came from Rearden's looting competitor, Orren Boyle (p. 476).

Atlas overturns all the textbook stereotypes about the profit motive. The opposite motive—which Rand calls "anti-greed"—is dramatized in the decline of the 20th Century Motor Company. It began as a great enterprise, built by Jed Starnes, who hired Galt to work in the laboratory, but when Starnes' heirs take it over they implement the Marxist view that production should come "from each according to his ability" whereas payments should go "to each according to his need" (p. 610). In time, the firm's top minds quit, beginning with Galt. Laborers compete, trying to prove that they are the least able and most needy (pp. 611–17). Production falls 40 percent in six months; the company goes bust. The vultures swoop in and take everything—except what is truly valuable: Galt's discarded plans for a revolutionary motor.

The Marxist scheme was financed by Eugene Lawson, "the banker with a heart" (p. 276). He tells Dagny that he "wasn't concerned with the parasites of office and laboratory" but with "the real workers—the men of callused hands who keep a factory going" (p. 290). As to the factory's eventually closing, Lawson says, "I am perfectly innocent, Miss Taggart. I can proudly say that in all my life I have *never* made a profit!" "Mr. Lawson," she responds, "[O]f all the statements a man can make, *that* is the one I consider most despicable" (p. 313).

Atlas shows that the statists, not the capitalists, are the real "robber barons," using brute force to enslave the men of ability. In the story, as freedom vanishes, so do businessmen and profits. Amid force, the pyramid of ability is both inverted and perverted. The worst of men get to the top of businesses and ruin every remaining value by subjugating the best minds that remain. James Taggart pretends to manage a railroad and destroys it while Galt uses his muscles in its tunnels perfectly well. Meanwhile, Dagny is burdened with petty crises that subordinates should but cannot handle; Eddie Willers holds positions that are over his head; and Rearden fixes furnaces. Producers are forced by law to split up their assets, which are transferred from men such as Rearden, to relatives and acquaintances such as Phil Larkin—from the Atlases who hold up the world to the ants who struggle under a matchstick. The Taggart Board meets in the cold, with coats, scarves, and hacking coughs. A conservation law forbids elevators to rise above the twenty-fifth floor, so "the tops of the cities were cut down" (p. 465). These are the offices where the men of top ability once worked.

As to the *opportunity* to profit, Galt explains: "A farmer will not invest the effort of one summer if he's unable to calculate his chances of a harvest. But you expect industrial giants—who plan in terms of decades, invest in terms of generations, and undertake ninety-nine year contracts—to continue to function and produce, not knowing what random caprice in the skull of what random official will descend upon them at what moment to demolish the whole of their effort. Drifters and physical laborers live and plan by the range of a day. The better the mind, the longer the range. A man whose vision extends to a shanty, might continue to build on your quicksands, to grab a fast profit and run. A man who envisions sky-scrapers will not" (p. 978).

That Rand considers freedom a prerequisite of production is clear from the basic plot of *Atlas*: As statists extend and intensify their controls, the economy only further decays and ultimately collapses as the men of the mind flee from oppression. At the same time, freedom in Galt's Gulch enables a small economy to grow and flourish as it attracts rational, productive men—men who seek to live.

How do profits arise? As *Atlas* shows, they are created by those who have the means, motive, and opportunity to produce. Profits come from rational men using their minds toward self-interested goals under political freedom.

The Essence of Competition

Modern economists generally regard competition as destructive. They view businessmen as engaging in cutthroat or "dog-eat-dog" aggression, fighting over a

fixed hunk of wealth. What one business gains, another necessarily loses, they say; it's a zero-sum game. The situation is typically described using the language of war. There are "predatory pricing" policies "hostile takeovers," "raids," "poison pills," "greenmail" and "battles" for "market share." The results of such competition are "trampled little guys," "concentrations of wealth," "imperialism," and the like. The solution, we are told, is government intervention in the economy—whether full-scale socialism or the conservatives' dream of "perfect competition." Perfect competition, we are told, is a state in which the government intervenes just enough to ensure that there are many firms in every industry and no one faces any hurdles to entering any industry he wishes; no firm exercises any influence on the price of what it sells or differentiates its product from others; each has an equivalent share of the market; and none makes any profit.¹¹

Again, *Atlas* dramatizes the truth of the matter, showing that competition in a free economy consists of businesses creating values and offering them for sale in a marketplace, where their customers, potential customers, and competitors also are creators of value, all trading by mutual consent to mutual advantage. Some firms thrive, create whole markets, outperform their competitors, and make huge profits; others do not, but no one is forced to deal with anyone, no one is forbidden to advance, and no one is punished for succeeding.

Consider the distinct attitudes of Dagny and her brother, Jim, toward a rising competitor, Dan Conway's Phoenix-Durango line. Conway's railroad is "small and struggling, but struggling well" (p. 58). Taggart Transcontinental spans "from ocean to ocean" but has stagnated and is gradually losing business to Conway. Jim calls Conway a "thief," as if Taggart owns its customers and Conway is stealing them. When Ellis Wyatt switches from Taggart to Conway's Phoenix-Durango, Jim cries that Wyatt didn't give Taggart time to grow along with him. "He's dislocated the economy. . . . How can we have any security or plan anything if everything changes all the time? . . . We can't help it if we're up against destructive competition of that kind" (p. 18). "[T]he Phoenix-Durango has robbed us of all our business down there" (p. 28). It is not in the public interest, Jim says, to "tolerate wasteful duplication of services and the destructive, dog-eat-dog competition of new-comers in territories where established companies have historical priorities" (p. 51).

Dagny, in contrast, is not threatened by Conway; she knows he's a producer, not a destroyer, and that Jim and the Board alone are responsible for Taggart's failures. "The Phoenix-Durango is an excellent railroad," she says, "but I intend to make the Rio Norte Line better than that. I'm going to beat the Phoenix-Durango,

if necessary—only it won't be necessary, because there'll be room for two or three railroads to make fortunes in Colorado. Because I'd mortgage the system to build a branch to any district around Ellis Wyatt" (p. 28). Eventually Dagny regains Wyatt's business when she builds the John Galt Line.

Francisco best sums up the nature of competition: "[Y]ou say that money is made by the strong at the expense of the weak? What strength do you mean? It is not the strength of guns or muscles." Money is not made by the intelligent at the expense of fools or by the able at the expense of the incompetent or by the ambitious at the expense of the lazy, Francisco explains. "Money is made—before it can be looted or mooched—made by the effort of every honest man, each to the extent of his ability," and when men are free to trade, the best man, the best product, and the best performance win—but at no one's expense (p. 383).

The railroad alliance in Atlas adopts the "Anti-Dog-Eat-Dog Rule," which blames transportation shortages on "vicious competition" and demands government subsidies whenever a large, established railroad suffers a loss. Regions can have only one railroad, to be decided by seniority. Newcomers who encroach "unfairly" must suspend operations. Jim votes for it, knowing it will destroy Dan Conway's Line. Conway quits when he learns of it. Although the Rule is devised to "help" Taggart Transcontinental, Dagny is furious when she hears about it. She meets with Conway and tries to stop him from quitting. Her aim was to build a better railroad, she tells him. She doesn't give a damn about his railroad, but she isn't a looter. Conway chuckles in appreciation. But he accepts the looters' premise of the public good. "I thought what I had done down there in Colorado was good. Good for everybody," he tells Dagny. "You damn fool," she says. "Don't you see that that's what you're being punished for—because it was good? . . . Nothing can make it moral to destroy the best. One can't be punished for being good. One can't be penalized for ability. If that is right we'd better start slaughtering one another, because there isn't any right at all in the world!" (p. 79). Meanwhile, Jim tries to seize the remains of Conway's railroad in a fire sale. Conway sells pieces to every stray comer, but refuses to sell anything to Taggart. "Dan Conway is a bastard," Jim screams. "He refused to sell us the Colorado track. . . . [Y]ou should see those vultures flocking to him." It's against the intent of the Anti-Dog-Eat-Dog Rule, he says, because the Rule was intended to help essential systems like Taggart's (p. 166). Here's a looter calling the parasites vultures.

Other laws are passed in a similar vein, posing as pro-competitive: The Railroad Unification Plan (p. 774), The Preservation of Livelihood Law (p. 279), The Equalization of Opportunity Law (p. 125), The Fair Share Law (p. 337). By

design and in practice, each penalizes success and robs producers for the benefit of the laggards and looters. Orren Boyle claims: "Private property is a trusteeship held for the benefit of society as a whole. . . . Most of us don't own iron mines. How can we compete with a man who's got a corner on God's natural resources? . . . It seems to me that the national policy ought to be aimed at giving everybody a chance at his fair share of iron ore, with a view toward the preservation of the industry as a whole" (pp. 50–51). "[T]here's nothing more destructive than a monopoly," he says. Except, says Jim, "the blight of unbridled competition." Boyle agrees: "The proper course is always, in my opinion, in the middle. So it is, I think, the duty of society to snip the extremes" (p. 50). Boyle's view represents the statists' dream of the government regulating or trust-busting business just the right amount to establish "perfect competition."

Rand ridicules the view that such laws promote competition and free enterprise. The Equalization of Opportunity Law forbids anyone to own more than one business concern. A newspaper editorial argues that in a time of dwindling production and vanishing opportunities to make a living, it's unfair to let one man "hoard" businesses while others have none. "Competition [is] essential to society and it is society's duty to see that no competitor ever [rises] beyond the range of anybody who wanted to compete with him" (p. 125). Philosopher Simon Pritchett says he supports the law because he is in favor of a free economy. "A free economy cannot exist without competition," he says. "Therefore, men must be forced to compete. Therefore, we must control men in order to force them to be free" (p. 127). There is no better account of the mindless and contradictory web that is antitrust law—a web used to entangle and strangle the creators and to provide the parasites with the unearned (which, in their ineptitude, they cannot manage anyway).

When Mr. Mowen of Amalgamated Switch and Signal complains to Dagny that Rearden metal will not melt under less than 4,000 degrees, Dagny says, Great! "Great?" says Mowen. "Well, maybe that's great for motor manufacturers, but what I'm thinking of is that it means a new type of furnace, a new process entirely, men to be trained, schedules upset, work rules shot, everything balled up and then God knows whether it will come out alright or not!"(p. 155). Mowen later loses business to Stockton Foundry because Andrew Stockton chooses Rearden's metal and succeeds. "Rearden shouldn't be allowed to ruin people's markets like that," Mowen now cries. "I want to get some Rearden Metal, too, I need it—but try and get it!" "I'm as good as the next fellow. I'm entitled to my share of that Metal" (p. 254).

When Dagny queries Lee Hunsacker on the whereabouts of Galt's motor, he says he is unaware but alleges that Ted Neilson had made a new and better motor. "How could we fight this Nielsen, when nobody had given us a motor to compete with his?" (p. 298), cries Hunsacker, ignorant of the fact that Galt had been designing his superior motor in Hunsacker's own factory, until looters such as Ivy Starnes arrived. Dagny interviews scientists to see if they can reconstruct the motor, but none can. One tells her, "I don't think such a motor should ever be made, even if somebody did learn how to make it," because "it would be so superior to anything we've got that it would be unfair to lesser scientists because it would leave no field for their achievements and abilities. I don't think that the strong should have the right to wound the self-esteem of the weak" (p. 330).

The looter's hatred for capitalism as a dynamic system is best dramatized in the passage of Directive 10-289, which freezes all employment, sales levels, prices, wages, interest rates, profits, and production methods. Jim Taggart is happy that it will also mean the closing of experimental industrial research labs. "It will end wasteful competition," he says. "We'll stop scrambling to beat one another to the untried and the unknown. We won't have to worry about new inventions upsetting the market. We don't have to pour money down the drains in useless experiments just to keep up with overambitious competitors." Yes, agrees Orren Boyle. "Nobody should be allowed to waste money on the new until everybody has plenty of the old" (p. 503). James says, "We'll be safe for the first time in centuries! Everyone will know his place and job, and everybody else's place and job—and we won't be at the mercy of every stray crank with a new idea. Nobody will push us out of business or steal our markets or undersell us or make us obsolete. Nobody will come to us offering some damn new gadget and putting us on the spot to decide whether we'll lose our shirt if we buy it, or whether we'll lose our shirt if we don't but somebody else does! We won't have to decide. Nobody will be permitted to decide anything; it will be decided once and for all. . . . There's been enough invented already—enough for everybody's comfort—why should they be allowed to go on inventing? Why should we permit them to blast the ground from under our feet every few steps? Why should we be kept on the go in eternal uncertainty? Just because of a few restless, ambitious adventurers? Heroes? They've done nothing but harm, all through history. They've kept mankind running a wild race, with no breathing spell . . ." (p. 504).

In *Atlas* we see not only that large firms do not threaten small ones, but also that they make small ones possible. Reporting on the oil industry, after Wyatt quits, the newspapers cheer that it's now "a field day for the little guy." All the

two-bit operators who had cried that Wyatt left them no chance now feel free to make fortunes. They form a co-op, but together they can't pump as much oil as Wyatt; they can't supply the huge power companies he used to supply, so the power companies switch to coal. As more oil fields close down, exploration costs skyrocket. A drill bit is now five times more expensive, because the market for them is shrinking—no economies of scale. The "little guys" soon learn that "the operating costs, which had once permitted them to exist on their sixty-acre fields, had been made possible by the miles of Wyatt's hillside and had gone in the same coils of smoke" (p. 327).

Elsewhere, Jim says that Taggart freight cars aren't profitable because the shippers are demanding lower freight rates than before. Why lower? Local measures broke up the big shippers; now there are more shippers but smaller ones, and their unit costs are much higher. They try to offset these higher costs by demanding lower rail rates from Taggart. Jim protests: Even he sees that the railroad can no longer give the reduced rates that were made possible by the higher volume of the big shippers (p. 467). *Atlas* shows that a pyramid of ability exists not only within companies, but within *industries*—and that antitrust laws destroy this pyramid, too. Jim sees this on some level, but it doesn't stop him from supporting antitrust laws.

Destruction is precisely the outcome when the state intervenes to help a laggard. Taggart gets subsidies under the Railroad Unification Act (p. 774) because it has not only the most lines, but also the most idle track. Here is the Marxist principle of contributions to come "from each according to his ability" while subsidies go "to each according to his need," now applied to an industry. Dagny tries to stop it but cannot. Jim says the act is "harmonizing" the industry, eliminating "cutthroat" competition. It has eliminated 30 percent of the trains in the country. Eddie Willers tells Dagny, "the only competition left is in the applications to the [Railroad] Board [in Washington] for permission to cancel trains. The railroad to survive will be the one that manages to run no trains at all" (p. 776).

In *Atlas* we see that government intervention, in killing *real* competition, destroys businesses, industries, and markets. And we see that businessmen who advocate government intervention are guilty of crimes against reality and humanity. As Galt puts it, "The businessman who, to protect his stagnation, takes pleasure in chaining the ability of competitors" shares the premises of "those who seek, not to live, but to *get away with living* . . ." (p. 963). Such businessmen are "wishing facts out of existence, and destruction is the only means of their wish. If they pursue it, they will not achieve a market . . . they will merely destroy production" (p. 736).

"You did not care to compete in terms of intelligence—you are now competing in terms of brutality. You did not care to allow rewards to be won by successful production—you are now running a race in which rewards are won by successful plunder. You call it selfish and cruel that men should trade value for value—you have now established an unselfish society where they trade extortion for extortion" (p. 980).

What is economic competition? The textbooks again preach falsehoods, claiming it is "dog-eat-dog," destructive, and should be regulated thoroughly or just enough to "level the playing field" and rid markets of "imperfections" and winners. Thus the textbooks support statist measures such as antitrust laws. 12 Atlas, in contrast, shows that the essence of competition is businessmen creating and offering goods or services in the marketplace, and aiming to provide higher quality, greater convenience, and/or lower prices than other businesses do. The entire process is made possible by rational, long-range thinking and trading, in which all rational parties benefit to the extent of their effort and ability.

The Results of Production

Having seen how *Atlas* differs from modern economics texts on such issues as the source of production, the businessman's role in it, the origin of profit, and the essence of competition, we now contrast their views on the *results* of production. This may seem to be a straightforward issue, as the production of goods clearly enables savings, capital accumulation, investment, further production, and a constantly improved standard of living. What more need be said? If left free, will we not live happily ever after?

According to modern economists, the answer is no. Production, they say, often goes too far—and goes haywire. The tendency of a free market is toward *overproduction*, or in the vernacular, "gluts." From this "excessive" production, it is claimed, we get such bad things as inventory buildup, followed by production cutbacks, plant and store closing, layoffs, recessions, debt defaults, and bankruptcies. The deeper cause of such trouble, we are told, is the profit motive, which pushes businessmen to save, invest, and produce beyond all necessity.

In regard to the consumption side of the coin, the problem is said to be *underconsumption*, or "insufficient demand." Again, the exploitative profit motive is blamed. Supposedly, workers are not paid enough to "buy back" the full product they produce; they cannot buy back all of it because greed-motivated profit growth outstrips wage growth. As output exceeds the demand for it, huge inventories of goods pile up unsold. Instead of cutting prices or paying higher wages, which al-

legedly would reduce profit, greedy businessmen close factories and fire workers, and mass unemployment ensues.

According to the textbooks, the "solution" to such problems is state intervention. Governments must enact policies to impede saving, investment, and profit-seeking—and to promote the consumption of wealth. One such policy is the graduated income tax, which takes from those who save and invest a greater portion of their income, and gives to those who consume most or all of theirs. "Makework" schemes and "jobless benefits" accomplish the same end by giving wealth claims to nonworkers. Likewise, the printing of fiat money devalues the wealth of producers. Other policies aimed at curbing or venting "excess" production include restrictions on imports and subsidies for exports.

Production has other harmful effects, as well, say the textbooks. Too much output, it is claimed, causes "inflation." An economy can "overheat," like a car engine. Why does this happen? Again, the villain is the profit motive. To get more output, the capitalist needs more workers and more machinery, and to obtain them he must bid up wages and make purchases. But to pay higher wages and make capital expenditures without sacrificing his profit, he must raise his prices. The result is "inflation." Whereas commonsense would say that fast economic growth and a low jobless rate are good news, the textbooks say these are actually bad news. The government's central bank must curb inflation by curbing its alleged causes: economic growth and job creation.

What students do *not* learn today is that classical economists—such as Adam Smith, James Mill, and Jean Baptiste Say—blasted these myths nearly two centuries ago. Above all it was Say's Law that identified the economic axiom that all demand comes from supply. Demand is not simply a desire for material wealth—it is the desire backed up by purchasing power. But purchasing power necessarily must come from prior production. Whenever we enter a market to purchase something, we must offer goods we have produced (in the case of barter) or else money that we have received as income for goods we have produced. This is the essence of Say's Law: supply *constitutes* demand.¹³

One corollary of Say's Law is that all markets are made possible by *producers*, not by consumers. Another corollary is that no demand (the exchange of values) or consumption (the use of values) can occur prior to production. Say's Law entails the principle of the *primacy of production*, which is much like Ayn Rand's formulation in metaphysics of the *primacy of existence*. Just as *existence* exists prior to (and apart from) our *consciousness*, so also *production* exists prior to and apart from our *consumption*. Consciousness depends on existence; it does not create it. Likewise,

consumption depends on production; it does not create it. Existence and production are the respective primaries. Those who hold *consciousness as primary* believe wishing makes things so. Those who hold *consumption as primary* believe they can have their cake and eat it, too. The primacy of existence says that our main focus should be on *reality*. The primacy of production says that our main focus should be on wealth creation.

Atlas dramatizes the classical position on these issues, and Say's Law is incorporated in the novel by implication. Production is shown to be a life-giving value, not the root source of recessions or inflation. Wealth is shown not to contain the seeds of poverty but to make possible further production and consumption. For example, Rearden Metal makes possible faster trains and stronger bridges; it does not "displace" or "unemploy" resources; rather, it makes new resources and better employment possible. The same goes for Galt's motor. When Dagny and Rearden think about its possibilities, they estimate that it will add "about ten years . . . to the life of every person in this country—if you consider how many things it would have made easier and cheaper to produce, how many hours of human labor it would have released for other work, and how much more anyone's work would have brought him. Locomotives? What about automobiles and ships and airplanes with a motor of this kind? And tractors. And power plants. All hooked to an unlimited supply of energy, with no fuel to pay for, except a few pennies' worth to keep the converter going. That motor could have set the whole country in motion and on fire" (p. 271).

Rand dramatizes the life-giving nature of production with the metaphor of the body's circulatory system. She describes the opening of Wyatt's oil wells as follows: "the heart had started pumping, the black blood . . . blood is supposed to feed, to give life . . ."(p. 18). When Eddie Willers consults the map of the Taggart rail system, the metaphor appears yet again: "[T]he network of red lines slashing the faded body of the country from New York to San Francisco, looked like a system of blood vessels. . . . as if once, long ago, the blood had shot down the main artery and, under the pressure of its own over-abundance, had branched out at random points, running all over the country" (p. 15). The "overabundance" does not mean overproduction or random abundance. The Taggart lines grew with other industries; demand for new rail lines came from the output of other businesses and industries. The supplies and incomes generated by Taggart's rail lines constituted demand for steel and oil. In short, Atlas shows that markets are made by producers—and it celebrates the principle. Recall, for instance, that when Dagny completes the John Galt Line and prepares for its inaugural run, she announces that

it won't be a passenger express loaded with celebrities and politicians, as is the custom for inaugural runs, but a freight special carrying goods from farms, lumber yards, mines (p. 216).

Atlas further emphasizes the primacy of production in Galt's Gulch. Once Dagny enters the Gulch and sees Ellis Wyatt producing oil from shale, she asks him, "Where's your market?" Wyatt answers, "Market?" "Only those who produce, not those who consume, can ever be anybody's market." "I deal with the life-givers, not with cannibals. If my oil takes less effort to produce, I ask less of the men to whom I trade it for the things I need. I add an extra span of time to their lives with every gallon of oil that they burn. And since they're men like me, they keep inventing faster ways to make the things they make—so every one of them grants me an added minute, hour or day with the bread I buy from them, with the clothes, the lumber, the metal, an added year with every month of electricity I purchase. That's our market and that's how it works for us. . . . Here we trade achievements, not failures—values, not needs. We're free of one another, yet we all grow together" (pp. 666-67). The dramatization of such principles—that production constitutes demand and that producers alone comprise markets—shows the absurdity of such myths as the possibility of "overproduction" and "underconsumption" in a free market.

Atlas also shows that the primacy of production does not mean the exclusivity of production. The heroes do not produce for the sake of producing. They recognize that production is the precondition for consumption but that it is not an end in itself. Production is a means to an end. Dagny expresses the point when she sees Galt's powerhouse in the valley: "She knew that there was no meaning in motors or factories or trains, that their only meaning was in a man's enjoyment of his life, which they served" (p. 674). The heroes enjoy their wealth. Recall the description of Midas Mulligan's cabin in the valley, which exhibits the wealth not of accumulation, but of selection. Consumption does not create wealth; in fact, it is the using up of wealth—for the sustenance and enjoyment of life.

The textbook view that production has harmful effects is dramatized by Dr. Potter of the State Science Institute, when he tries to convince Rearden to stop making his metal. "Our economy is not ready for it," he tells Rearden. "Our economy is in a state of extremely precarious equilibrium. . . . [We need] just a temporary delay. Just to give our economy a chance to get stabilized. . . . [V]iew the picture from the angle of the alarming growth of unemployment. . . . At a time of desperate steel shortage we cannot afford to permit the expansion of a steel company which produces too much, because it might throw out of business the com-

panies which produce too little, thus creating an unbalanced economy" (p. 170). The "solution" for this alleged glut of output is the Equalization of Opportunity Bill, intended to redistribute industrial holdings. "I don't see why businessmen object to [the Bill]," says Betty Pope "in the tone of an expert on economics. 'If everybody else is poor, they won't have any market for their goods. But if they stop being selfish and share the goods they've hoarded—they'll have a chance to work hard and produce some more" (p. 130). Betty Pope is an "expert" on modern economic principles (i.e., myths). To her, markets are made not by producers but by nonproducing consumers; the moochers are doing businessmen a "favor" by looting and consuming their "excess" goods.

The myth that consumption somehow is a boon to production is dramatized in Jim Taggart's plan to divert resources from the Rio Norte Line to the San Sebastian Line across the Mexican desert. He claims the scheme will create prosperity, but "no surge of trade had come across the border" and "after three years the drain on Taggart Transcontinental still hadn't stopped" (p. 59). Jim's line is pure consumption; it only uses up or destroys wealth—and Atlas shows what such statist schemes mean for production. "A depot of reinforced concrete, with marble columns and mirrors, was built amidst the dust of an unpaved square in a Mexican village, while a train of tank cars carrying oil went hurtling down an embankment and into a blazing junk pile, because a rail had split on the Rio Norte Line" (p. 58). When Francisco is asked about the line, he feigns surprise at its failure: "Doesn't everyone believe that in order to get the goods, all you have to do is need them?" (p. 137). When later he learns that the United States has resorted to rationing, allegedly to equalize consumption and stabilize production, he remarks: "The nation which had once held the creed that greatness is achieved by production, is now told that it is achieved by squalor" (p. 463).

Many brief scenes further dramatize the fallacy that consumer spending or consumption fosters production. During Thanksgiving, for instance, Rearden reminds Dagny that it's "a holiday established by productive people to celebrate the success of their work" (p. 441). But during dinner at his home, Rearden's mother tells him he should thank "the people of this country who have given you so much" (p. 429). Throughout the novel producers are told they must grant wage hikes to laborers regardless of productivity. "Maybe you can't afford to give them a raise," someone remarks, "but how can they afford to exist when the cost of living has shot sky-high? They've got to eat, don't they? That comes first, railroad or no railroad" (p. 468). This is the primacy of consumption mentality. Near the novel's end Rearden's brother, Philip, approaches him with the same premise, seeking a

job. Rearden points to the workers: "Can you do what they're doing?" No, says Philip, but his need and desire should be sufficient. Besides, Philip adds, "What's more important, that your damn steel gets poured, or that I eat?" Rearden retorts: "How do you propose to eat if the steel doesn't get poured?" (p. 854). This is the primacy of production axiom.

Modern economists and textbooks also preach that government intervention prevents or cures "gluts" and "stabilizes" the economy. *Atlas* shows the truth: Government intervention creates shortages by penalizing producers and shrinking the markets that only they make possible. By promoting consumption, it wreaks destruction. The disappearance of producers makes the effect crystal clear. As Galt puts it: "Let him try to claim, when there are no victims to pay for it . . . that he will collect a harvest tomorrow by devouring his seed stock today—and reality will wipe him out, as he deserves" (p. 936).

Unemployment, inflation, and stagnation all result from government intervention, not capitalism, yet the looters in *Atlas*, as if reading a script straight from today's textbooks, blame free markets and seek greater power to "stabilize" the economy.

When Directive 10-289 is passed, Wesley Mouch says the law will stop the nation's economic retrogression by freezing everything in place. "Our sole objective," he says, "must now be to hold the line. To stand still in order to catch our stride. To achieve total stability" (p. 497). One group demands passage of a "Public Stability Law," which forbids firms to move among states. Meanwhile, a state economic planning bureau issues innumerable edicts repeating such phrases as "unbalanced economy" and "emergency powers" (p. 279). An "unbalanced economy" is one in which the aggregate supply of goods and services does not equal their aggregate demand—a blatant *denial* of the truth of Say's Law. For an economist to deny Say's Law is the equivalent of a physicist denying the Law of Gravity or a philosopher denying the Law of Identity.

Statists' evasions aside, the fact remains that markets are made by producers and shrink under the touch of statists and their consumptionist cheerleaders. A producer benefits from dealing with other producers, not with incompetents or "consumers" who have nothing to offer in trade. As Dagny puts it, "I can run a good railroad. I can't run it across a continent of share croppers who're not good enough to grow turnips successfully. I've got to have men like Ellis Wyatt to produce something to fill the trains I run" (p. 84). When she and Rearden visit a remote town, they see a small local railroad pulled by an ancient coal-burning locomotive; she asks if he can imagine the Comet being pulled by one (later it

is, through Winston Tunnel). "I keep thinking, it won't be any use, all my new track and all your new furnaces, if we don't find someone able to produce Diesel engines" (p. 263).

Atlas dramatizes the chain reaction caused when statist controls forced Rearden and Danagger to delay shipments of steel and coal to Taggart Transcontinental. A freight train is delayed; then produce rots and must be dumped; some California growers and farmers go out of business, along with a commission house, as does the plumbing company the house owed money to, and then a lead pipe wholesaler that had supplied the plumbing company. Rand says, "Few people noticed how these events related to one another." More delays cause the failures of a ball-bearing company in Colorado, then a motor company in Michigan waiting for ball bearings, then a sawmill in Oregon waiting for motors, then a lumberyard in Iowa dependent on the sawmill, and finally a building contractor in Illinois who was waiting for lumber. "Purchasers of his homes were sent wandering down snowswept roads in search of that which did not exist any longer" (p. 462).

Such events powerfully dramatize the principle that *markets are made by produc*ers—and thwarted by statists.

Later, Galt names the essence of consumption-based economics, which is embodied in today's textbooks (especially Samuelson's): "They want you to go on, to work, to feed them, and when you collapse, there will be another victim starting out and feeding them, while struggling to survive—and the span of each succeeding victim will be shorter, and while you'll die to leave them a railroad, your last descendent-in-spirit will die to leave them a loaf of bread. This does not worry the looters of the moment. Their plan . . . is only that the loot shall last their lifetime" (p. 683).

Consumption, at root, is an act of destruction, in that it uses up wealth. Those who create wealth use it as a means of enjoying life. They live by means of production. Those who seek to consume wealth without producing it seek to live without enacting the cause of life. They seek to live by means of destruction.

"Frantic cowards," says Galt, "now define the purpose of economics as 'an adjustment between the unlimited *desires* of men and the goods supplied in limited quantity.' Supplied—by whom? Blank-out." "The problem of production, they tell you, has been solved and deserves no study or concern; the only problem left for your 'reflexes' to solve is now the problem of distribution. Who solved the problem of production? Humanity, they answer. What was the solution? The goods are here. How did they get here? Somehow. What caused it? Nothing has causes" (p. 959). But "the law of identity does not permit you to have your cake

and eat it, too," he adds, and "the law of causality does not permit you to eat your cake *before* you have it. . . . [if] you drown both laws in the blanks of your mind, if you pretend to yourself and to others that you don't see—then you can try to proclaim your right to eat your cake today and mine tomorrow, you can preach that the way to have cake is to eat it, first, before you bake it, that the way to produce is to start by consuming, that all wishers have an equal claim to all things, since nothing is caused by anything" (p. 954). "An action not caused by an entity would be caused by a zero, which would mean a *zero* controlling a *thing* . . . which is the universe of your teachers' desire . . . the goal of their morality, their politics, their economics, the ideal they strive for: the reign of the zero" (p. 954).

Recall the metaphor of the life-giving circulatory system and the Taggart Transcontinental map. Amid widening economic breakdown and edicts diverting her trains to parasites, Dagny looks at the map and thinks: "There had been a time when the railroad was called the blood system of a nation, and the stream of trains had been like a living circuit of blood, bringing growth and wealth to every patch of wilderness it touched. Now, it was still like a stream of blood, but like the one-way stream that runs from a wound, draining the last of a body's sustenance and life. One-way traffic, she thought indifferently—consumer's traffic" (p. 837). Later in the novel, when yet another copper wire breaks in New York City, Taggart's signal lights go out. At the entrance to the tunnels "a cluster of trains gathered and then grew through the minutes of stillness, like blood damned by a clot inside a vein, unable to rush into the chambers of the heart" (p. 868). The life-giving system based on the primacy of production is being killed by the myth of the primacy of consumption, the reign of the zero.

Today's economics textbooks—Samuelson's especially—embody the views of John Maynard Keynes, the 20th century's arch-promoter of consumption-based economics and outspoken critic of Say's Law. ¹⁴ During the Great Depression, conservatives, unable to challenge statist controls on moral and philosophic grounds, insisted that in the long run the economy would recover on its own. Keynes retorted, "In the long run we're all dead." This is the range-of-the-moment mentality typical of a consumption-oriented theorist. A Keynes-like entity appears in *Atlas*, in the person of Cuffy Meigs, enforcer of the Railroad Unification Plan. He wields "a rabbit's foot in one pocket" and "an automatic pistol in the other." Dagny notes that Meigs' plan will cannibalize the railroad system, and asks how it will be revised in the future. "You're impractical," says Jim. "It's perfectly useless to theorize about the future when we have to take care of the emergency of the moment. In

the long run—" he starts to continue, but Meigs interrupts and says, "In the long run, we'll all be dead" (p. 777).

Atlas dramatizes the fact that producers, left free, do not cause "overproduction," "imbalances," "unemployment," or "inflation"; rather, they cause life-giving, life-sustaining abundance. The primacy of production rests on the laws of identity and causality; its application gives rise to life and prosperity. The primacy of consumption, in contrast, rests on a denial of the laws of logic and economics; its application leads to destruction and death.

The Purpose of Money

Modern economists and textbooks typically nod to such uncontroversial and long-recognized truths as that money is a medium of exchange, a unit of account, and a store of value, but they fail to recognize the fundamental purpose of money, which is to integrate the economy. They also fail to recognize the need—and even the possibility—of an objective monetary standard. And they fail to recognize the morality and practicality of free-market banking—despite the fact that gold-based and relatively-free banking operated successfully in the United States (and elsewhere) from 1790 until 1913 (except when suspended during the Civil War) and despite the fact that today the safest banking is also the freest: the relatively unregulated, nongovernment-insured money market mutual fund industry.

Atlas, in contrast, shows the true nature and function of money. It shows that for an economy to function properly, banking must be left to the market. And it shows what happens when the government intervenes in money and banking.

From a broad perspective, we find throughout the story occasional allusions to a steady decline in the value and fixity of money. In the age of the heroes' ancestors, we learn that there was gold money and a reliable standard. Even at the outset of *Atlas*, well before the economy collapses, there is some semblance of predictability, longer-range planning, and an ability to calculate future investment returns. But fiat money circulates, at least outside Galt's Gulch. In Francisco's money speech (a third of the way through the book), he refers to "those pieces of paper, which should have been gold" as "a token of honor." And he explains: "Whenever destroyers appear among men, they start by destroying money. . . . [They] seize gold and leave to its owners a counterfeit pile of paper. This kills all objective standards and delivers men into the arbitrary power of an arbitrary setter of values. Paper is a mortgage on wealth that does not exist, backed by a gun aimed at those who are expected to produce it. Paper is a check drawn by legal looters upon an account which is not theirs: upon the virtue of the victims" (pp. 385–86).

As the story proceeds, there is frequent evidence of inflation, such as a mention that the cost of living is rising faster than wages. Prices become more detached from reality, as money is detached from gold. Fiat money is being printed in abundance, but prices are not allowed to rise, so goods become increasingly scarce. Producers refuse to offer their goods at prices that are too low, and buyers demand too many goods for the very same reason, so demand exceeds supply. Once Directive 10-289 freezes *all* prices, disintegration and shortages become ubiquitous. Eventually, not even price controls can mask inflation, which soon accelerates into hyperinflation. Near the end of the story, we read that "wads of worthless paper money were growing heavier in the pockets of the nation, but there was less and less for it to buy. In September a bushel of wheat had cost \$11; it had cost \$30 in November; it had cost \$100 in December; it was now (January) approaching the price of \$200, while the printing presses of the government treasury were running a race with starvation, and losing" (p. 995).

Francisco explains that "money is a tool of exchange, which cannot exist unless there are goods produced and men able to produce them." "Money is your means of survival," he adds. However: "Money will always be an effect and refuse to replace you as the cause" (pp. 410, 412). This principle is dramatized in (among other places) the scene where Dagny and Hank visit the now abandoned 20th Century Motor Company. The town, once vibrant, wallows in poverty. Seeing a frail old man lugging heavy buckets of water, "Rearden took out a ten dollar bill [worth \$100 today] and extended it to him, asking: 'Would you please tell us the way to the factory?' The man stared at the money with sullen indifference, not moving, not lifting a hand for it, still clutching the two buckets. 'We don't need no money around here," he said. Rearden asked, "Do you work for a living? . . . what do you use for money?" "We don't use no money," the old man responds. "We just trade things amongst us." "How do you trade with people from other towns?" Rearden asks. "We don't go to no other towns" (p. 266).

Near the end of the novel, when state thugs try to make Galt the nation's economic dictator, he refuses, and Mr. Thompson, the head of state, responds by saying, "I can offer you anything you ask. Just name it." Galt says, "You name it." Thompson replies, "Well, you talked a lot about wealth. If it's money that you want—you couldn't make in three lifetimes what I can hand over to you in a minute, cash on the barrel. Want a billion dollars—a cool, neat, billion dollars?" [i.e., \$10 billion in today's depreciated money]. Galt answers: "Which I'll have to produce, for you to give to me?" Thompson: "No, I mean straight out of the public treasury, in fresh, new bills . . . or . . . even in gold, if you prefer." Galt: "What

will it buy me?" Thompson: "Oh, look, when the country gets back on its feet . . "Galt: "When I put it back on its feet?" (p. 1013).

Throughout *Atlas*, Rand dramatizes the fact that money is an effect of wealth, not its cause, and that its real value depends entirely on the wealth producers.

The Spirit of Atlantis

A brief account of the organization of Galt's Gulch, or "Atlantis," in *Atlas* provides a good summary of the economic principles demonstrated in the novel. Early and interesting intimations of Atlantis appear throughout the story. Someone mentions a "place where hero-spirits lived in a happiness unknown to the rest of the earth"—"a place which only the spirits of heroes could enter." We are told that the heroes "reached it without dying, because they carried the secret of life with them" (p. 147). The secret, ultimately revealed in the valley, is that man's mind is the source of all values and all wealth.

Galt's Gulch began as Midas Mulligan's private retreat, and he tells Dagny he bought the property years ago, "section by section, from ranchers and cattlemen who didn't know what they owned." Mulligan built his own house and stocked it so as to be self-supporting, "so I could live here the rest of my life and never have to see the face of another looter" (p. 689). As the best minds and top producers are invited to the Gulch, they either move there permanently or visit and work for a month in summer. Mulligan sells them various pieces of land. There are no laws, because in so rational and small a society, arbitration by Judge Narragansett is sufficient. The valley has farms, an industrial district, and a single street with retail stores. The only things inhabitants can bring into the Gulch are some of their machines and their gold—the "frozen forms of intelligence."

Galt invents the most advanced technologies while in the Gulch: a screen of refracted light rays to hide the valley from above; a powerhouse the size of a tool-shed that provides all the energy, with a door that opens by a voice recognition device. Upon seeing it, Dagny "thought of this structure, half the size of a boxcar, replacing the power plants of the country, the enormous conglomerations of steel, fuel, and effort—she thought of the current flowing from this structure, lifting ounces, pounds, tons of strain from the shoulders of those who would make it or use it, adding hours, days and years of liberated time to their lives . . . paid for by the energy of a single mind" (p. 674). She learns that all the producers in the valley are more productive now that they are politically free, their neighbors are producers, and their wealth is safe.

In Galt's Gulch we see that Francisco mines copper, Wyatt produces oil from shale, and Dwight Sanders maintains aircraft, which he used to build. Midas Mulligan mints gold coins, operates a gold-standard bank, and lends money for worthy projects. Others work outside their specialty. Lawrence Hammond, the carmaker, runs a grocery store; Sanders and Judge Narragansett farm; Ted Nielson, maker of diesel engines, runs a lumberyard. Stressing the individualism, productiveness, and pride that permeate the Gulch, the retail stores on Main Street bear the names of the owners: Hammond Grocery Market, Mulligan General Store, Atwood Leather Goods, Neilson Lumber, Mulligan Bank. To Dagny they sounded like "a list of quotations from the richest stock exchange in the world, or like a roll call of honor" (p. 672). Dick McNamara, one-time contractor of Taggart Transcontinental, operates the utilities and has some interesting helpers, such as "a professor of history who couldn't get a job outside because he taught that the inhabitants of slums were not the men who made this country," and "a professor of economics who couldn't get a job outside, because he taught that you can't consume more than you have produced" (p. 663).

All production in the valley exudes the excellence that accompanies a rational society and a fully free market. Homes, for instance, were built "with prodigal ingenuity of thought and a tight economy of physical effort," "no two were alike," and "the only quality they had in common was the stamp of a mind grasping a problem and solving it" (p. 672).

According to textbook myths, a closed society with such inhabitants—those who once had been the leaders of industry—would not work. Their soft hands and corrupt motives would lead them to fumble around and ultimately starve because there are no manual laborers for them to exploit or customers to bilk. Perhaps while they starved they would also cause inflation, financial crises, mass unemployment, and the like.

The truth, however, as *Atlas* demonstrates, is that the men at the top of the pyramid of ability can do not only their jobs but many of the jobs normally done by those lower on the pyramid. They can, when necessary, do manual labor, or direct animals to labor for them (as when Francisco uses mules to transport his output). Although there are too few people in this small society for complete specialization, the inhabitants of the Gulch are happy to be free in a small but thriving economy rather than enslaved in a large but decaying one. Dwight Sanders works as a hog farmer *and* an airfield attendant, and tells Dagny, "I'm doing quite well at producing ham and bacon without the men from whom I used to buy it. But those

men cannot produce airplanes without me—and, without me, they cannot even produce ham and bacon" (p. 662).

There is also intense competition in the valley—which is good for everyone. Recall that when Dagny visits Andrew Stockton's foundry, he tells her that he began by putting a competitor out of business. "There's my ruined competitor," he says benevolently, pointing to a young man in his shop. "The boy couldn't do the kind of job I did, it was only a part-time business for him, anyway—sculpture is his real business—so he came to work for me. He's making more money now," Stockton adds, "in shorter hours, than he used to make in his own foundry"—so he spends his new free time sculpting (p. 668).

Dagny is amazed to find that Stockton's foreman is Ken Danagger, former head of Danagger Coal, and asks, "Aren't you training a man who could become your most dangerous competitor?" Stockton replies: "That's the only sort of men I like to hire. Dagny, have you lived too long among the looters? Have you come to believe that one man's ability is a threat to another? Any man who's afraid of hiring the best ability he can find, is a cheat who's in a business where he doesn't belong" (p. 670).

Not surprisingly, the money in Galt's Gulch is gold—and Midas Mulligan mints it. To Dagny, who is accustomed to the inflation and controls of the outside world, prices in the Gulch are astonishingly low, which means the value of the money is high, reflecting both the abundance of wealth in the valley and Mulligan's credibility as a reputable money issuer. The gold in Mulligan's Bank belongs to the producers, much of it retrieved by the efforts of Ragnar Danneschold, the anti-Robin Hood who takes gold back from the looters and returns it to their rightful owners. Earlier in the story, when Ragnar meets Rearden, he tells him his wealth has been deposited in a gold-standard bank and that "Gold is the objective value, the means of preserving one's wealth and one's future" (p. 535). This is that bank.

Mulligan mints the gold into usable coinage, the likes of which, we learn, have not circulated since the days of Nat Taggart. The coins bear the head of the Statue of Liberty on one side and the words "United States of America—One Dollar," on the other. When Dagny learns that Mulligan mints the coins, she asks, "[O]n whose authority?" Galt answers, "That's stated on the coin—on both sides of it" (p. 671). When Dagny talks to Mulligan, he tells her his business is "blood-transfusion." "My job is to feed a life-fuel into [those] who are capable of growing," but "no amount of blood will save a body that refuses to function, a rotten hulk that expects to exist without effort. My blood bank is gold. Gold is a fuel that will perform wonders, but no fuel can work where there is no motor" (p. 681).

Conclusion

Atlas is a story about a man who said he would stop the motor of the world, and did. That motor is the rational thought and productive effort of businessmen dedicated to making money by trading value for value with other rational people. This motor is also what economics proper studies.

Whereas modern economics is boring because it ignores the facts of reality, *Atlas* is exciting because it identifies those facts. *Atlas* dramatizes (among other things) the reality-based principles of economics, and it does so with colorful characters, powerful imagery, breathtaking mystery, and correct philosophy. Rand takes us where no modern textbook can. She dramatizes the essence and virtue of capitalism because she knows which facts give rise to the need of the system and thus why it is both moral (i.e., life-serving) and practical. Unlike the indifferent, dismissive passengers on the train passing Rearden's mills, those who did not care to notice achievement, let alone celebrate it, Rand looked at reality and wrote a novel that dramatizes not only the truths of economics, but also, and more fundamentally, the moral and philosophic truths on which those truths depend.

Paul Samuelson was fond of saying, "I don't care who writes a nation's laws, or crafts its advanced treatises, if I can write its economics textbooks." He exaggerated not only his own influence, but the influence of the field of economics itself. In fact, it is *philosophy*, for good or ill, that establishes the basic foundation, premises, and future path of every other science—including economics.

It would matter little who wrote the nation's laws or advanced treatises or economics texts—if *Atlas Shrugged* were widely read, studied, and understood. When enough people grasp the meaning of *Atlas*, everything else will follow. Atlantis will then become a reality, in the proud slogan of Taggart Transcontinental, "From Ocean to Ocean."

Endnotes

- 1. Granted not all economists agree with everything in Samuelson's book—including Samuelson himself, who wrote nineteen editions of it. But his text is as representative of the general views of modern economists as any.
- 2. It was not Rand's aim in *Atlas* to teach lessons in economics; nevertheless, as we will see, she ingeniously concretizes and dramatizes proper economic principles.
- 3. An early version of the labor theory of value seems to arise in chapter 5 ("On Property") of the Second Treatise of Government (1690) by John Locke (1632–1704), but the account does not specify manual labor alone and does not exclude the mind's work from value determination.

- 4. For a technical account of this idea by a professional economist, see Howard Baetjer, "Capital as Embodied Knowledge: Some Implications for the Theory of Economic Growth," *Review of Austrian Economics*, vol. 13 (2000), pp. 147–74.
- 5. Samuelson devotes less than a page to the entrepreneur in his 784-page book (*Economics*, 14th ed., [New York: McGraw-Hill], pp. 279, 699), equates him with the inventor, insists that "such people should not be confused with managers who run large and small companies," and declares that they profit only fleetingly by means of a "a temporary pool of monopoly." See also Humberto Barreto, *The Entrepreneur in Microeconomic Theory: Disappearance and Explanation* (London: Routledge, 1989).
- 6. John Maynard Keynes, *The General Theory of Employment, Interest & Money* (London: Harcourt Brace, 1936), pp. 161–62.
- 7. The idea was most famously advanced by Ludwig von Mises in *Human Action: A Treatise on Economics* (New Haven: Yale University Press, 3rd ed., 1963), pp. 269–70, where he writes that businessmen may be "at the helm and steer the ship" of production, but "they are bound to obey unconditionally the captain's orders," and "the captain is the consumer," for "neither the entrepreneurs nor the farmers nor the capitalists determine what is to be produced" because "the consumers do that."
- 8. Jean Baptiste Say is a major exception to the general rule that economists historically have failed to identify the mind or the entrepreneur as the main creator of wealth. Unlike the other classical economists (from Smith to Marx), Say rejected the labor theory of value and explained how intelligence is the source of wealth. See his *Treatise on Political Economy* (1803), available at http://www.efm.bris.ac.uk/het/say/treatise.pdf.
- 9. A good example of such independence is Steve Jobs, head of Apple computer, who was asked recently what consumer or market research Apple had conducted in developing the iPad tablet. "None," he replied. "It isn't the consumers' job to know what they want." (Steve Lohr, "Can Apple Find More Hits Without Its Tastemaker?" *New York Times*, January 19, 2011, p. B1.
- 10. See especially Frank Knight, in his book Risk, Uncertainty and Profit (Boston: Houghton Mifflin, 1921), on "perfect competition," as well as George Gilder, Wealth and Poverty (New York: Basic Books, 1981), pp. 259–69 on the businessman as inspired by faith and altruistic gift-giving; and Israel M. Kirzner, Competition and Entrepreneurship, (Chicago: University of Chicago Press, 1973) on the entrepreneurial process as mere glorified guesswork.
- 11. Samuelson, *Economics*, pp. 140–44, 291–96, and 732. See also John Roberts, "Perfectly and Imperfectly Competitive Markets," in *The New Palgrave Dictionary of Economics*, vol. 3 (London: Macmillan, 1987), pp. 837–38.
- 12. See Richard M. Salsman, "The False Profits of Antitrust," in Gary Hull, ed., *The Abolition of Antitrust* (New Brunswick, NJ: Transaction Publishers, 2005), pp. 27–59.
- 13. See Steven Kates, Say's Law and the Keynesian Revolution: How Macroeconomics Lost Its Way (Cheltenham: Edward Elgar, 1998).
- 14. That Keynes has made a comeback can be seen, among other places, in Sudeep Reddy, "The New Old Big Thing in Economics: J. M. Keynes," *Wall Street Journal*, January 8, 2009; George Melloan, "We're All Keynesians Again," *Wall Street Journal*, January 13, 2009; and Robert Samuelson, "How 'Saving' Capitalism Can Kill It Instead," *Investors' Business Daily*, March 20, 2009.
- 15. Cited in Michael M. Weinstein, "Paul A. Samuelson, Economist, Dies at 94," *New York Times*, December 14, 2009, A1.