the type Ostrom identifies not only address public goods, but are what keeps the only barber in a small town from charging a monopoly price for haircuts. Whether libertarians should feel more comforted by the power of social norms relative to the power of collective government might be worth some thought. Complaints from conservative academics about the oppressive leftist culture in universities, going back to William F. Buckley 65 years ago, suggest that social norms strong enough to influence outcomes may not be an unmitigated blessing.

Conclusion / These observations will not deter readers who are already disposed to solutions to environmental problems based on relatively costless negotiations among stakeholders with clearly defined property rights. The question remains how to get this sermon to be heard beyond the choir.

One impediment the authors could have done something about is their book's title. Posing the issue as between "free market environmentalism" and "political environmentalism"—with the appendage "coerced" proving impossible to resist for the latter—will put off some readers as biased rhetoric reflecting an ideological commitment disconnected from outcomes. One could imagine the reaction from property rights proponents if the options were "exploitative capitalist environmentalism" and "democratic environmentalism."

A less rhetorical observation is that the "free" in "free" markets not only rhetorically implies a value judgment, it also rests on a value judgment that the underlying distribution of property rights is normatively acceptable. "Your money or your life" is a voluntary transaction if the holder of the gun has a prior property right over the life of the person staring into the barrel.

A harder challenge beyond the scope of the book is defending the view that the objective of environmental policy should be what the market produces or, at least, would have produced were property rights feasible to define and transaction costs negligible. Economic efficiency—that the environment deserves no more protection than that for which environmentalists are willing to pay to compensate polluters—is irrelevant for those who find environmental protection morally compelling in and of itself.

Emphasizing Coase's perspective and economic efficiency also presents challenges to libertarians. The appeal of free market environmentalism is not the outcome as such, but the process: the view that (relative to the initial assignment of property rights) the outcome is voluntary and mutual. But if economic or political circumstances preclude ideal transactions, economic efficiency and libertarian norms can come into conflict.

Climate policy is a powerful example because of its prominence and because there is no time machine that would allow current generations to negotiate with and compensate future generations to arrive at mutually agreeable sacrifices to limit climate change. Basing the libertarian argument against climate policy not on this involuntary redistribution but on alleged failures of science gives the almost certainly inaccurate impression that if the science were different, libertarians would then find climate policy acceptable.

By clarifying the nature of environmental policy choices, *Free Market Environmentalism for the Next Generation* may help move this debate away from disputes about science and toward deliberation regarding political values.

Hedgehogs, Foxes, and Economists

REVIEW BY PHIL R. MURRAY

My professor had just finished covering the chalkboard with the First Fundamental Theorem of Welfare Economics, showing that free markets allocate resources efficiently. This was in the early 1990s, shortly after the Eastern Europeans abandoned central economic planning. I wondered whether the theorem endorsed capitalism. My professor pointed out that the economist's notion of Pareto efficiency was consistent with him being in possession of all the goods while the rest of us had none. He said, if I recall correctly, "That's not much of an endorsement for capitalism, is it?"

He was not taking sides in capitalism versus socialism; he was refining our understanding of efficiency in light of distribution. I still ponder the relationship between the First Fundamental Theorem and the real world. Does the theory exalt markets? If not, assuming markets outperform central planning, how good is the theory?

Harvard economist Dani Rodrik's book *Economics Rules* helps answer questions like these. "I wrote this book," he tells us, "to try to explain why economics sometimes gets it right and sometimes doesn't."

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Modeling the world / There are two types of economics, according to Rodrik. On the one hand, "economics is a social science devoted to understanding how the economy works." On the other, "economics is a way of doing social science, using particular tools. In this interpretation," he elaborates, "the discipline is associated with an apparatus of formal modeling and statistical analysis rather than particular hypotheses or theories about the economy."

Rodrik prefers the latter approach. He defines models "as simplifications designed to show how specific mechanisms work by isolating them from other, confounding effects." His first example is the model of supply and demand, which explains the efficient operation of a market. His second is the prisoners' dilemma model, which explains how "two firms end up in a bad equilibrium in which both have to waste resources." His third is a "coordination model": If each of two firms in different industries buys capital, both will "end up profitable and happy." If they fail to coordinate, which means neither buys capital, there will be an equilibrium, though neither firm will be profitable. His point is that a market works well, or fails to work, depending on the model.

He emphasizes that there is an abundance of models, and that this is a good thing. "The correct answer to almost any question in economics is, it depends," he claims. An abundance of models is a good thing because "different models, each equally respectable, provide different answers."

Take this question: "Does the minimum wage lower or raise employment?" The standard model of supply and demand predicts that employers faced with a higher minimum wage will lay off workers. An alternative model, in which employers have monopsony power, predicts that employers will hire additional workers. To paraphrase the author, the minimum wage eliminates the monopsonist employer's ability to influence workers' wages. Denied the option to pay a lower wage and hire less labor, and now able to hire more labor without having to pay a higher wage (up to a point), the employer hires additional workers to increase output and revenue. Whether the standard model or the monopsony model is relevant depends on "critical assumptions." According to Rodrik, "an assumption is critical if its modification in an arguably more realistic direction would produce a substantive difference in the conclusion produced by the model." With respect to the minimum wage, the standard model's assumption that employers take the wage rate as given is critical because if it's unrealistic, the conclusion that a minimum wage reduces employment will not hold. Likewise for the alternative model: assuming that employers influence wages is critical because, if that's unrealistic, then the conclusion that a minimum wage increases employment will not hold.

Verifying the models / How does one know which model is appropriate? This leads to Rodrik's methodology of "model selection," or what he calls the "craft" of economics. "The key skill," he submits, "is being able to move back and forth between the candidate models and the real world." One does this by using these "verification strategies":

- Verify critical assumptions of a model to see how well they reflect the setting in question.
- Verify that the mechanisms posited in the model are, in fact, operating.
- Verify that the direct implications of the model are borne out.
- Verify whether the incidental implications—those that the model generates as a by-product—are broadly consistent with observed outcomes.

Let's consider each. Following the author, suppose a rising price of oil causes the public to clamor for a legal maximum price. If we assume that producers take the price of oil as given, the "competitive model" of the market for oil predicts that the legal maximum price will cause a shortage. If we assume that producers are colluding to restrict output and raise the price, the "monopoly model" predicts that a legal maximum price—provided that it is "not set too low"—will induce producers to compete, increase output, and lower the price. In the competitive model, the critical assumption is that individual producers cannot influence the price of oil. In the monopoly model, the critical assumption is that producers can influence the price by forming a cartel.

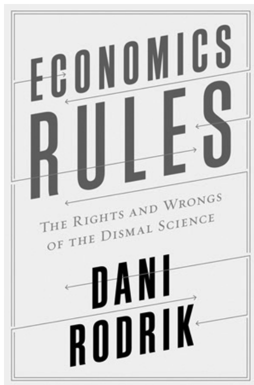
Here's how Rodrik would verify whether producers have market power: he'd examine the number of producers in the market, the market share of each, and the extent of barriers to entry. Many producers, less concentration, and few barriers support the competitive model. Few producers, greater concentration, and significant barriers would support the monopoly model.

Sticking with alternative models of the market for oil, both the competitive model and the monopoly model "derive," to use Rodrik's jargon, the "mechanism" by which a decrease in the supply of oil causes the price to rise. He verifies that this process is at work in the market for oil because it "makes sense intuitively" and "there are plenty of real-world examples" of a decrease in the supply leading to a higher price of oil. Recall the 1970s.

Confirming that a model's predictions are consistent with what's happening in the real world involves more than econometrics. "Economists employ a wide range of strategies to verify whether the immediate implications of different models are confirmed in the real world," Rodrik explains, "from the informal and anecdotal to the sophisticated and quantitative." For example, being familiar with the Mexican economy would confirm that the monopoly model had long been appropriate for the Mexican oil industry. Now that the Mexican government is allowing the private sector to develop oil resources, the competitive model will be more appropriate so long as we observe increasing output and falling prices.

Rodrik discusses various types of economic "experiments." "Thanks to [lab experiments]," for instance, "economists are learning more about what drives human behavior besides material self-interest, such as altruism, reciprocity, and trust." The author recognizes that "many economists remain skeptical" of lab experiments. The "field experiment" and "natural experiment" appear to be clever and promising techniques to verify direct implications, though caution is still necessary because specific experimental outcomes "may not apply to other settings." What motivates some teachers in India to show up and do their jobs, for example, is "placing cameras in the classroom." However that tactic might not motivate teachers elsewhere.

Models have "incidental implications." For example, the standard model about the minimum wage law focuses on the direct implication of reduced employment of low-skilled workers. Perhaps an incidental implication is that firms will substitute workers with more skills for less-skilled workers and employment of the former will rise. Other incidental implications might be the effect on non-wage benefits or the prices of goods and services produced with lots of low-skilled labor. Verifying whether low-skilled workers, who manage to keep their jobs following an increase in the minimum wage, suffer the loss of non-wage benefits helps us to decide whether the standard model is correct; likewise for output prices.



Economics Rules: The Rights and Wrongs of the Dismal Science

By Dani Rodrik

253 pp.; W. W. Norton, 2015

Economists' errors / A former professor of mine joked that economists have license to wreck the economy. Some wreckage follows from "errors of commission, in which fixation on a particular view of the world makes economists complicit in policies whose failure might have been predicted ahead of time." In order to illustrate this mistake, Rodrik focuses on the ideology of the Washington Consensus, which he characterizes as "'market fundamentalism,' the blanket term for the view that markets are the solution to all public policy problems." Market fundamentalists, for instance, would recommend free trade as a growth strategy for developing economies. Lower tariffs encourage imports and discourage import-competing industries. Simultaneously, entrepreneurs redeploy idle resources in expanding export industries. "In Latin American and African countries that adopted this strategy," Rodrik tells us, "the first part of this prediction largely materialized, but not the second." How could this misfortune "have been predicted"? By recognizing "the deeper institutional underpinnings of a market economy," such as "the rule of law" and "contract enforcement." Real market fundamentalists, of course, would resist the charge that they fail to recognize the importance of institutions.

Rodrik cites developing country successes in Asia. Curiously, this is not because governments permitted free trade in the context of proper institutions (property rights, rule of law, and contract enforcement). "Instead of liberalizing imports early on," Rodrik explains, "South Korea, Taiwan, and, later, China all began their export push by directly subsidizing homegrown manufacturing." Trade barriers "protected" import-competing industries so as to prevent unemployment. To boot, "all of them undertook industrial policies to nurture new manufacturing sectors." Just when this reviewer thought he was supposed to swallow the bitter pill that free markets don't work and central planning does, Rodrik warns: "This interpretation is incorrect." The moral of the Asian success stories, according to the author, is that economists should know when to use "models that take on board some of the major second-best challenges these economies faced."

Another way "economists go wrong" is through "errors of omission, in which a blind spot shows up in the inability to see troubles looming ahead." In order to explain this problem, he focuses on the Great Recession. Most economists failed to forecast the financial crisis of 2008. Specifically, they "overlooked the extent of problems in housing and finance." Why were economists unable to anticipate the bursting of the bubble in house prices and the financial panic that ensued? They were relying on the wrong models. "Many of the favored models," according to Rodrik, "revolved around the 'efficient markets hypothesis' (EMH)." The gist of the hypothesis is that the price of an asset (such as a stock) equals the value of the asset. Proponents of the EMH refrain from predicting future stock returns. Rodrik does not expect them to predict when recessions will occur. His critique is that "it is hard to square the model with reality: a sustained rise in asset prices followed by a sharp collapse."

The author nevertheless tells us how to align the EMH with the events of 2008. When expectations suddenly switched from economic growth to recession, according to this account, a large sell-off occurred. Although that story reconciles the EMH with the crash in the stock market, Rodrik finds fault in that it "reverses the generally accepted line of causation, which goes from the financial crash to the Great Recession."

The author argues that instead of relying so heavily on the EMH, economists should have been pondering bubbles, principal-agent problems, and behavioral finance. It's safe to say that he criticizes his fellow economists for putting too much "faith" in markets and too little in government. "In sum," he concludes, "economists (and those who listened to them) became overconfident in their preferred models of the moment: markets are efficient, financial innovation improves the risk-return trade-off, self-regulation works best, and government intervention is ineffective and harmful." Perhaps the zeitgeist leading up to the financial crisis of 2008 was enthusiasm for markets, globalization, and technology. But then, perhaps the author commits his own "error of omission" by neglecting to mention the role of dubious government interventions that played a role in the financial crisis, such as Fannie Mae and Freddie Mac, and political pressure that lowered lending standards.

Conclusion / Rodrik is critical of a pro-market bias. "It is certainly true," he claims, "that economists err on the side of markets." But he is not anti-market. Economists "think they understand how markets work," he admits, "and they fear that most of the public doesn't—and they are largely right on both suppositions."

In order to recommend the proper perspective for an economist, the author turns to the difference between a "hedgehog" and a "fox." According to Rodrik,

> The hedgehog's take on a problem can always be predicted: the solution lies in freer markets, regardless of the exact nature of and context for the economic problem. Foxes will answer, "It depends"; sometimes they recommend more markets, sometimes more government.

Given this taxonomy, the author reasons that "Economics needs fewer hedgehogs and more foxes engaged in public debates." This raises questions. Does he consider economists with a penchant for government intervention to also be hedgehogs? Does he think we need fewer of them? What economists are quintessential examples of hedgehogs and foxes? If good economists are foxes, was another of my professors correct to claim that "Good economists are like good lawyers: they can argue both ways"? *R*

Liberty and the Ruling Class

REVIEW BY THOMAS A. HEMPHILL

Larry Lindsey knows whereof he speaks. As a former governor of the Federal Reserve System from 1991 to 1997, and as director of the National Economic Council under George W. Bush, he has helped craft economic policy at the highest levels of government. However, while the Harvard-educated economist views himself—along with many other people with whom he served in government—as "getting the job done and moving on," he is concerned about a different group of top-level government employees who, he says, have a very different agenda. As he writes in his new book, *Conspiracies of the Ruling Class:*

> The purpose of their government service was to accumulate personal power and to exercise that power over others. They didn't have a noble cause, even though they always acted as though they did, but a hidden need to wield power and maintain control of their little domain.

Lindsey notes that he did not take "these people" too seriously until they began expanding their fiefdoms and turned their attention from the bureaucracy to the country itself and individuals like him. "These people" are politicians, appointees, and bureaucrats who are career government employees and academics who wait for their opportunities to assume positions of political power. He dubs them "the Ruling Class" and describes them thus:

> They view their jobs not as leaders, who encourage the rest of us to make the most of our talents, but as people who are superior—as though they are the shepherds and we the sheep. They ridicule the successful and do everything they can to make the population dependent on them.

Lindsey identifies "progressives," or modern liberals, as the ideological group that is the latest incarnation of the Ruling Class. Secure in their control of the media, the entertainment industry, and academia, a member of the Ruling Class will adopt an ideal such as "social justice" when in government service and attempt to implement this vision of a "just" world by taxing and spending, thus redistributing wealth by taking money from one person and giving it to another.

Lindsey divides his book into three parts. In the first, he discusses the Ruling Class's threat to individual liberty. Beginning with a historical view of the imperious ruler having absolute or near absolute control over his subjects through most of the history of humanity, to the unique notion of a constitution embodying federalism and the rights of the individual resulting from the heroic efforts of the Founding Fathers, he lays out antecedents to the modern progressives' ongoing assaults on the U.S. Constitution. As he notes, "The Ruling Class have rebranded themselves from the beneficiaries of a despot who inherited his position to a new kind of despot who inherited his position for the benefit of his society."

In part two, Lindsey evaluates the governing performance of the Ruling Class in America over the latter part of the 20th century through the years of the Obama administration. Increasing economic inequality for America's minorities; a burgeoning national debt and inadequate sustainable funding of Social Security and Medicare; declining performance of American children in reading, writing, and arithmetic (as compared to other developed nations); bureaucratic and economic mismanagement of the nation's physical infrastructure; ongoing governmental threats to limit the rights of Americans to arm themselves for their self-defense; and expansion and abuse of the government's powers (and consequent deterioration in due process and accountability) in the civil taking of citizens' property are explained and described with publicly available data and explicit examples of ruling class behavior.

In part three, he offers his policy prescriptions for regaining the liberties that have been slipping away from Americans. This is the section of the book that fulfills his subtitle—*How to Break Their Grip Forever*—and he explains what activities and policies he believes Americans must embrace to throw off control by the Ruling Class.

Securing liberty / Lindsey makes an empirical case that there is a pro-liberty majority in America, noting that in an April 2012 survey, potential voters said they wanted smaller government by a 22-point margin and believed that government regulation made society less fair by a 28-point margin. Moreover, in a March 2015 Rasmus-

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