

IN REVIEW

Pinging the Robot Next Door

◆ REVIEW BY PIERRE LEMIEUX

Before the tragedy of Malaysian Airlines Flight MH370, many people did not know that an airplane could, of and by itself, “ping” a satellite. A ping is a signal that a machine sends to another machine to check the possibility of communicating—in effect, to say “Hi.” Computers have been communicating with each other for several

decades, but nothing on the scale and banality of today’s networks. And we have seen nothing yet.

To understand our “Second Machine Age,” as Massachusetts Institute of Technology researchers Erik Brynjolfsson and Andrew McAfee call it, one must look at the First Machine Age, the Industrial Revolution. It started with the steam engine in the 18th century. The increased productivity that this innovation and others generated brought economic growth never seen before in the history of mankind. The Industrial Revolution continued with two new innovations at the end of the 19th century: electricity and the internal combustion engine. The resulting machines replaced muscle power and greatly increased production and incomes, including for the poor.

Brynjolfsson and McAfee’s latest book, *The Second Machine Age*, endeavors to achieve three tasks: explain the Second Machine Age and the opportunities it creates, analyze the disruptions and problems it will cause, and explore ways to keep the benefits while minimizing the costs.

What can machines do? / In the Second Machine Age, machines will not replace or multiply muscle power, but brainpower. For many, this was heralded in 1997 when Deep Blue, an IBM computer, beat Gary

Kasparov, the world chess champion. But that was only the beginning of the *visible* revolution, which had been smoldering for two or three decades. Just four years later, Watson, another IBM computer, won the knowledge game Jeopardy against two champions.

With hindsight, playing chess should be easy for a computer because the rules are simple. As for winning at Jeopardy, all that was needed was a lot of information that could be processed quickly. As late as 2004, however, some experts thought that driving a car required uniquely human skills because the task seemingly couldn’t be distilled into a computer algorithm. It took less than 10 years for that supposed impossibility to become a reality, with driverless Google cars now cruising Silicon Valley.

“In the next twenty-four months,” Brynjolfsson and McAfee write, “the planet will add more computer power than it did in all previous history.” Three broad factors are driving that development. First, and following Moore’s Law (computing capacity doubles every 18 months), the exponential development of machine intelligence (or artificial intelligence) is now reaching dramatic levels. Second, all information is

being digitized: maps, music, books, etc. Third, the new inventions are recombined and multiply into yet more inventions.

There is more to the Second Machine Age than treating information with brute computing force. “If you can give precise instructions to somebody on exactly what needs to be done,” Brynjolfsson and McAfee note, “you can often write a precise computer program to do the same task.” So robots can do many things that, previously, only humans could do. Baxter, a human-shaped robot made by Rethink Robotics in Boston, can work on the factory floor and be taught to make coffee on a house coffeemaker. He does this for \$4 an hour, all costs included, which is half the hourly wage at a Dunkin Donuts. This is just one example among many.

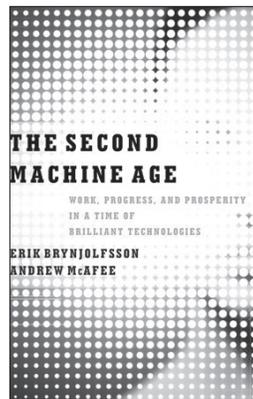
Computers are now able to write simple corporate earnings previews. They still cannot write good poetry or analytical books like *The Second Machine Age*. If and when

they do, humans could be in deep trouble. Only at the end of the book do Brynjolfsson and McAfee raise such dystopian possibilities, which had previously been the domain of science-fiction writers.

New Age economics |

Despite the dystopian possibilities, the authors of *The Second Machine Age* are optimistic that smart machines will increase, not decrease, human freedom. Their advice to individuals as to how to prepare for competition with the machines—mainly what to learn—is not useless, although perhaps too dismissive of traditional education.

Brynjolfsson and McAfee predict that the Second Machine Age will bring increased material abundance (though, of course, scarcity won’t be abolished). They envision many other economic consequences of quasi-intelligent machines. But here the book stumbles.



The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies

By Erik Brynjolfsson and Andrew McAfee

320 pp.; W. W. Norton & Co., 2014

Many of the new digital goods and services, the authors argue, are not accounted for in gross domestic product. They overstate their argument. The value added by social networks, even when free to users, is accounted for in the profits made by the providers (Facebook, Twitter, etc.) and their advertising customers. A service sold to advertisers instead of directly to consumers is not “virtually invisible in GDP.” It is not true, either, that Skype “may add zero to GDP,” since it sells premium services and offers the free services as a promotion. Moreover, Microsoft, which now owns Skype, uses the teleconferencing software to increase its own profits. And when the authors of *The Second Machine Age* claim in a footnote that an increase in crime can boost GDP, they fall victim to the famous broken-window fallacy. If this were not a fallacy in practice as well as in theory, GDP in Venezuela and Syria would be on a fast-rising curve.

It is true, as Brynjolfsson and McAfee note, that GDP does not measure welfare. But it is not technically meant to be the ultimate measure of human welfare, as all economists know—at least those who have looked at the methodology of GDP and know something of welfare economics. GDP is only a measure of market production. It does not measure consumer surplus (the difference between a good’s price and what a consumer is willing to pay for the good). So the authors make no discovery when they write that “TurboTax has created a great deal of value for its users, not all of which even shows up in the GDP statistics.” It can be easily conceded that the effect of the new economy on consumer welfare is higher than what GDP growth shows, but there is no need to appeal to the magical concept of Gross National Happiness as calculated by the government of Bhutan, which the authors “heartily support” along with social justice and other mantras.

Creative destruction and inequality / Just like the Industrial Revolution and its rebound at the turn of the 19th and 20th centuries, the Second Machine Age

will bring much creative destruction in its wake. People unable to compete with the machines will see their wages fall or lose their jobs. Middle-class jobs as well as many lower-class ones will disappear. Only people with cognitive jobs that are not repetitive, and thus can’t be automated, will benefit, as well as the robot owners.

The authors of *The Second Machine Age* emphasize that the gap between economic winners and losers will deepen, increasing inequality. More and more wealthy people will thrive at the top, and more and more poor will struggle at the bottom, while the middle class will be hollowed out. Oft-repeated statistics suggest that this trend has already started.

There is no doubt that much disruption will occur, and that—especially in the short run—there will be losers as well as winners. But the book overestimates the problem because it neglects or underplays several important mitigating factors.

As the authors readily admit, robots are often complementary to jobs, not always substitutes. Robots need conception, programming, training, maintenance, and support. The robots called “drones” provide an example: according to *The Economist*, a Reaper drone requires 180 people to keep it flying. There are some jobs that humans will always do better than computers, and they are not all on top of the employment ladder: an advanced robot still needs 24 minutes to fold a towel.

A simple economic fact underplayed by *The Second Machine Age* is that more robots—that is, more capital—will naturally increase the physical productivity of labor. It is true that, as a consequence, product prices will drop, which may lead to a reduction in the *value* of labor productivity. But the authors’ fear of a *general* overproduction of goods and services represents an especially weak part of their analysis.

Say’s Law suggests that, in the long run, supply creates its own demand because people work—that is, supply goods and services—only in order to satisfy their demand. Consequently, workers made redundant by technological progress will, by switching industry, generate a new demand equal to

the value of what they now produce. As long as somebody wants to consume more, free markets will absorb what suppliers produce. If Say’s Law did not exist, women, youngsters, or immigrants entering the labor force would steal jobs from others. Brynjolfsson and McAfee barely mention Say’s Law and strangely confuse it with price elasticities in particular markets.

Contra the Luddites, the authors do admit that employment grew with technology nearly nonstop since the Industrial Revolution. Just consider agriculture. From 1810 to 1910, the proportion of the American labor force occupied in agriculture dropped from 84 percent to 31 percent, and then to 8 percent in the following half century; now it is just 2 percent. When the former farmers switched to other industries, they created an equivalent demand for their new production. No technological unemployment developed.

The second machine age may be contributing to the increase in income inequality, but Brynjolfsson and McAfee downplay other causes, even if they admit the existence of many. “Factor equalization” is one of those other causes: globalization is fast increasing wages in underdeveloped countries and dampening increases in the developed world. But there are still other possible causes. A recent study by University of Pennsylvania economist Jeremy Greenwood et al. suggests that the growth of assortative marriage—marrying a person of the same level of education and income—explains *all* the increase in inequality. The role played by regulation and crony capitalism should also be considered. The recent increase in inequality seems overdetermined many times. Perhaps a perfect storm has developed.

We should not forget that welfare is what counts, not GDP, as Brynjolfsson and McAfee painstakingly argue and then apparently forget. What about the non-quantifiable value that the authors claimed is not recognized in GDP? Is it possible that the median consumer would not want to go back to his 1999 situation, when his money income peaked? In the longer run, moreover, people may not want to work

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more hours simply because they prefer more leisure instead of consuming more goods and services. Working is not the goal of economic life. Working less and consuming more is a benefit, not a cost.

Future problems will probably not be as serious as *The Second Machine Age* suggests. Computers cannot have ideas. They cannot be entrepreneurial. They cannot “think out of the box”; they are the box. Here Brynjolfsson and McAfee are brilliant: computers “are still machines for generating answers,” they write, “not posing interesting new questions.” And, citing Voltaire, they implore readers to “judge a man by his questions, not his answers.” So relax.

Market failures? / What should the state do? Brynjolfsson and McAfee vacillate between advocating little and much government intervention. They start by stressing how capitalism and free markets provide the only path to a prosperous future. Their (too) short critique of regulation is well taken. They admit that entrepreneurship is more efficient than government intervention. They argue for reducing barriers to immigration. But what is capitalism? How much can you stretch it before it breaks?

Except for schools, the authors of *The Second Machine Age* tend to ignore the effect that social, political, and economic institutions have on growth and prosperity. Some institutions are conducive to entrepreneurship and innovation; others are not. The two authors do not mention the role that institutions protecting individual liberty and private property rights had in starting the Industrial Revolution, which, after all, did not happen in Russia or Turkey. They barely mention “freedom” (and never “liberty”), while they seem obsessed with equality. They don’t mention incentives, although they could argue that this concept underlies their analysis.

They want to “grow the economy,” which requires government support and a sort of long-term Keynesian push on aggregate demand. Why not just leave the economy alone? In *The Rise and Decline of*

Nations, University of Maryland economist Mancur Olson argued, more correctly in my opinion, that “an economy with free markets and no government or cartel intervention is like teen-aged growth; it makes a lot of mistakes but nevertheless grows rapidly without special effort or encouragement.”

Brynjolfsson and McAfee tend to see market failures and externalities everywhere, even in unemployment. They argue that we must “support our scientists” (who might not be totally happy to learn they belong to us) with government funding. New or higher taxes are warranted. A minimum wage scheme based on a negative

The book’s recommendations are based on a naive, pre–Public Choice approach, as if government failures were not at least as prevalent as market failures.

income tax should be introduced. The authors of *The Second Machine Age* seem to trust that government will do all this efficiently, while reducing regulation and promoting entrepreneurship and economic growth.

They don’t seem to take seriously the fact that work is a cost, and that if more consumption can be obtained for less work, most people would be happier. It is true that some people find satisfaction and “purpose” in their jobs, although academics and intellectuals sometimes forget that not everybody has as pleasant a job as theirs. Any job has a leisure component, but most people would take the income and drop the job if that were an alternative. Consequently, governments should not support work as such, but only self-reliance and jobs that generate real incomes.

Despite all the pinging and networking, it is taking much time for the conclusions of—or at least the doubts raised by—welfare economics and social choice theory to trickle down to the layman and even to serious analysts occupied in other fields. *The Second Machine Age* is frustrating with its multitude of collective “we,” as if the

political “we” represented anything other than some arbitrary majority or minority. “[T]he future we get,” Brynjolfsson and McAfee write in typical Newspeak, “will depend on the choices we make.” [O]ur values will matter more than ever.” “We must think hard about what it is we really value, what we want more of, and what we want less of.” They even repeat the mantras of “we ... as a society” and “society as a whole.” But who is “we”? The authors never tell us.

The book’s policy recommendations are based on a naive, pre–Public Choice approach, as if government failures were not at least as prevalent as market failures. The authors seem to simply assume that the state is geared to reducing externalities for the unanimous good of everybody. They don’t consider the results of the actual political and bureaucratic processes.

They don’t envisage that a majority or even a minority can use the state to exploit the rest of the population.

This book is not an economists’ book. Brynjolfsson is a professor of management science and information technology at MIT and director of its Center for Digital Business. One of his graduate degrees is in “managerial economics,” but he appears to be more a management guru than an economist. McAfee has a graduate background in science and management. They are two very educated and no doubt interesting intellectuals, but not necessarily fluent in the fine points of economic theory. Of course, not being a wide-ranging economist is not a fault per se (one might have compensating qualities) and ideas should be judged for what they are, not for their sources. But a good command of economics remains useful in analyzing the economic effects of social or technological events, and in giving economic advice to policymakers.

Once you are aware of its pitfalls, this book is instructive. But it is mainly instructive on the technological front, not for its economic analysis. R

More Evidence for a Dichotomous Debate

◆ REVIEWED BY SAM BATKINS

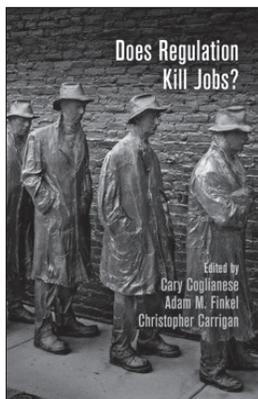
Does regulation kill jobs? Yes, but as editors Cary Coglianese, Adam Finkel, and Christopher Carrigan explain, arriving at that answer is far more complicated than the title of their new book. Former OIRA administrator Cass Sunstein described the matter this way: “The Republican claim that ‘job-killing regulation’ is a redundancy is as ridiculous as the left-wing view that ‘job-killing regulation’ is an oxymoron.” The truth—or what the empirical evidence reveals—is far more muddled. Regulation can eliminate jobs in affected industries, but like any government intervention, it can also “create” them in professions that must comply with the rule.

Coglianese, Finkel, and Carrigan give special attention to the human element in this debate. Regulation might result in a transfer—instead of a net loss—of jobs from one sector of the economy to another, but that transfer involves a human toll, not mere abstract data in a politically charged debate. Through a compendium of chapters by an interdisciplinary panel of experts and veterans of the “regulation versus jobs” debate, the editors bring greater clarity—through sometimes-technical discussions—to the heterogeneous world of regulation.

In the book’s first chapter, Coglianese and Carrigan note the cyclical timing of the regulation-versus-jobs debate. Not surprisingly, in periods of high unemployment, conservatives and libertarians often identify regulation as a significant impediment to job growth. Progressives, on the

other hand, see regulation as another government jobs machine, capable of creating millions of jobs at little to no cost. As former Environmental Protection Agency administrator Carol Browner once argued,

“[T]he EPA creates opportunities [and] creates jobs.” If it were that straightforward, it’s a wonder progressive politicians don’t run on a platform of promising more regulation in order to create more jobs. So why don’t they?



Does Regulation Kill Jobs?

Edited by Cary Coglianese, Adam Finkel, and Christopher Carrigan
312 pp.; University of Pennsylvania Press, 2014

eliminates 10,000 jobs, based on an economy-wide model, the total national effects are minimal.

In his contribution to the book, Resources for the Future senior fellow Richard Morgenstern (whose work is routinely cited by the EPA in regulatory impact analyses [RIAs]) surveys the available literature and notes the methodological difficulties confronting research in this area. He estimates that \$1 million in environmental spending translates into 1.5 new jobs, but he notes that estimate is “statistically insignificant.” That hasn’t

stopped some regulation proponents from arguing that environmental compliance could lead to a revolution in “green jobs.” Ceres, a coalition of environmental groups, has claimed that two new air pollution rules, Utility MACT and the Cross-State Air Pollution rule (CSAPR), would generate 1.5 million new jobs—300,000 annually—from the additional \$11 billion in new regulatory spending. That translates into 27 jobs per \$1 million in regulatory compliance—considerably more than Morgenstern’s estimate. The EPA has noted the vast amount of uncertainty on employment effects in its analysis of the two rules, concluding that Utility MACT would either cut 15,000 jobs or create 30,000, and CSAPR would reduce employment by 1,000 or increase it by 3,000.

Morgenstern cites Massachusetts Institute of Technology economist Michael Greenstone’s estimate that Clean Air Act nonattainment counties—that is, counties with air quality below federal standards, thus making the counties subject to stricter air pollution regulation—lost 590,000 jobs relative to attainment counties. However, those figures could have been the result of job transfers to attainment counties, meaning there were no net job losses. However, even if transfers explain the county job losses, transfers also have significant negative effects on workers. For instance, job displacement can lead to a 15 to 20 percent increase in death rates in the 20 years following displacement.

So what’s the conclusion? Morgenstern notes, “There is only limited evidence that environmental regulation leads to significant job loss.”

In another of the book’s chapters, Harvard University’s Joseph Aldy and Duke University’s William Pizer examine new research on regulation and the electricity industry. They find a significant nexus between rising, regulation-induced energy prices and declines in energy-intensive manufacturing industries. For example, a 5 percent increase in electricity prices reduces employment by 1.0–1.4 percent.

Those findings have profound implica-

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tions for regulations like Utility MACT and CSAPR. Aldy and Pizer examine the economic effects of CSAPR, as even the EPA admits the rule could increase energy prices by \$700 million. The authors find the rule could increase prices by 2.2 percent, enough to lower employment in certain energy-intensive manufacturing industries. The implications for onerous command-and-control regulation of power plants generate even more concern.

Reform / Those who have had the pleasure of reading an agency RIA might not remember the analysis's sober discussion of employment effects. That's because agencies routinely exclude employment effects from their analyses. That is one problem in the current debate: an omission of data from agencies.

As Rutgers University's Stuart Shapiro, a veteran of the Office of Information and Regulatory Analysis, details in his contribution to the book, there is a woeful lack of employment information in most analyses. Of the 56 RIAs he studied, only a minority mentioned employment, with 11 quantifying impacts. Shapiro's solution is to create a new federal office to study the employment effects of regulations. Ideally, the office would analyze regulations retrospectively.

The University of Chicago's Jonathan Masur and Eric Posner offer another solution for the lack of available data: simply force agencies to incorporate employment effects in RIAs. However, the authors' research details why agencies might have avoided this practice in the past. Masur and Posner looked at an EPA regulation that the agency initially estimated would have net benefits of \$159 million but, in a separate analysis, conceded it would result in 5,711 fewer jobs, which the agency didn't incorporate into its net benefits calculation. If a central estimate of \$100,000 per displaced worker is applied to the cost-benefit analysis, the net benefits turn into a net cost of \$411 million. If there is continued refusal by regulatory agencies to incorporate employment effects into their analyses, OIRA will need to step in

and challenge proposed rules that would eliminate jobs and impose high net costs.

Conclusion / The book is devoted to the principle that this topic needs more empirical data and a study of the human effects of job displacement. From a cost-benefit perspective, a job transfer might be an afterthought, but for those losing their

job—even for a time—there are significant emotional, physical, and pecuniary effects. As book contributor Brian Mannix notes, “No corporation has ever experienced a welfare loss”; that is, businesses do not *feel* the effects of regulation—but people do. As the book details, the debate over regulation and jobs is more than just political posturing and abstract figures. R

Why Isn't Peter Schuck a Libertarian?

◆ REVIEW BY DAVID R. HENDERSON

Peter Schuck's *Why Government Fails So Often* is one of the most important books of the year and may be one of the most important books of the decade. Although I have seen this prolific author's name over the years, I had never read any of his work. My loss. Fortunately, I have read every page—including endnotes—of his latest book, and it is a tour de force.

Schuck, the Simeon E. Baldwin Professor of Law Emeritus at Yale University, calls himself a “militant moderate.” I'm not sure what the “militant” part refers to; my guess is that it's his word for “passionate.” And, although he does come off as a political moderate, his reasoning is radical. That is, in virtually all of the many government policies and procedures he considers, Schuck goes to the root of the problem. He dissects the workings of government, explaining why it works so badly and creates so many problems. It isn't until Chapter 11 that he gets to his examples of policy successes, and most of them are either thin gruel or examples of successes resulting from *reductions* in government's reach. In his final chapter, Schuck advises everyone, including libertarians, “to accept” both the fact of government's many failures and his reasoning about those failures. But he then cautions conservatives to “accept the

fact” that “big government is here to stay.” Although he accepts the permanence of big government, his analysis of government's failures is so well-argued, so fact-based, and so devastating that it made me want to ask him, “Why aren't you a libertarian?”

Success and failure / To explain *why* government fails so often, Schuck must establish that it fails often. He does so throughout the book in a nice weaving of cause and effect. In Chapter Two, titled “Success, Failure, and In Between,” he gives his measures of success and failure. Schuck has fairly demanding, but not unreasonable, standards for total success. To succeed, in his view, a policy should pass a cost-benefit test, be “fair,” and be manageable. He then gives 14 more principles that a policy should comply with to be implemented. I won't state them all here, but all are sensible. The first is that policymakers “should intervene only when it will correct a significant market failure.” Another is that a program “should be target-efficient.” Yet another is that cost-benefit analysis “should be used to retrospectively analyze the effectiveness of existing policies,

DAVID R. HENDERSON is a research fellow with the Hoover Institution and an associate professor of economics at the Graduate School of Business and Public Policy at the Naval Postgraduate School in Monterey, Calif. He is the editor of *The Concise Encyclopedia of Economics* (Liberty Fund, 2008). He blogs at www.econlog.econlib.org.

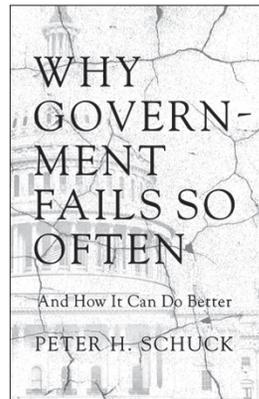
not just proposed ones.” The last of the 14 principles is that policymakers should avoid the “Nirvana fallacy.” Correctly citing University of California, Los Angeles economist Harold Demsetz (my mentor) as the originator of that term, Schuck explains that the Nirvana fallacy is what one commits when viewing a policy choice “as if it were one between an ideal program and the existing, flawed one.”

In his third and fourth chapters, Schuck discusses the structure of the U.S. political system and the political culture. Those chapters cover a lot of ground and are difficult to summarize succinctly. Suffice it to say that, although his own biases show at times, he does a nice job of explaining the federalist and cultural constraints under which U.S. policymakers must operate.

Although the whole book is interesting, it becomes a page-turner with Chapter Five, “Incentives and Collective Irrationality.” This is essentially Schuck’s version of public choice. Take one of the first sentences in the chapter: “First, *incentives* must be capable of eliciting the desired behaviors of both the policy makers and of the actors they must influence in order for the policy to work” (italics in original). This one sentence is far beyond what most advocates of government intervention ever discuss. What incentives do government officials have to do the efficient thing? Read through welfare economics articles and you can see sharp economists recognizing the various ways that markets can fail. But then, when they get to their government solutions, they write as if the incentives of the government officials trusted to formulate and implement the policies do not matter. That gap in thinking is a huge problem, and Schuck recognizes it. After listing five other factors that matter, he writes, “For deeply structural reasons, all six of these features are in shorter supply

in government than budget is.” He then adds, “To show why, I contrast government with markets that, for all their well-known imperfections, earn high marks for incentives, rationality, information generation, adaptability, credibility, and management.”

In this chapter, Schuck explicitly defends public choice from its critics, writing, “[P]ublic choice theory’s rational actor model explains and predicts far more observed official behavior than its main rival, public interest theory.” He then lays out how well public choice predicts the destructiveness of many government programs—programs that are destructive precisely because of the many perverse incentives that motivate politicians,



Why Government Fails So Often: And How It Can Do Better

By Peter H. Schuck
461 pp.; Princeton University Press, 2014

bureaucrats, special interests, and voters. Schuck gives many historical and contemporary examples of government programs that cause large inefficiencies, including unemployment insurance (creates the incentive to stay unemployed); disability insurance (creates the incentive to claim disability and quit work); and the Dodd-Frank Act (creates moral hazard by broadening the government’s safety net for risk takers). Interestingly, Schuck ends by critically discussing the claim of my co-blogger, George Mason University economist Bryan Caplan, that policymakers can sometimes “enact wiser policies than the median voter prefers.” When a noted moderate political scientist (Schuck) finds that a noted anarchist (Caplan) is *too optimistic* about the political system, you know you are reading an interesting book that cuts across conventional political categories.

Chapter Six, “Information, Inflexibility, Incredibility, and Mismanagement,” keeps up the drumbeat of government failure. Schuck lays out just how little government knows about many issues on which it acts. Take the fence on the U.S. border with Mexico that costs \$16 million per mile. Schuck points out that the government

doesn’t know whether the fence or other factors have caused the recent decline in illegal entries into the United States, but that ignorance hasn’t stopped government from spending more money on the fence. That’s not surprising. Members of Congress, he writes, “typically spend most of their time on fund-raising, campaigning, subcommittee work, and constituency-tending.” As a result, “they have little time to read or think deeply about issues.” Spend even a little time with congressmen, as I have, and you’ll see that first-hand.

In that same chapter, Schuck cites, as an example of government’s lack of credibility, the abrupt switch from George W. Bush’s goofy idea to fund a hydrogen car to Barack Obama’s goofy idea to place “his” money on electric-powered cars. Schuck also gives a devastating criticism—clearly written before the failed launch of the government’s health care website—of that website. And don’t miss his story about the U.S. Department of Agriculture’s office to inspect imported catfish, which, after it had spent \$20 million to establish the office “and \$14 million a year to run it,” had “not inspected a single catfish.”

In Chapter Seven, “Markets,” Schuck explains how well markets work and how policymakers who care about good results need to take account of that fact. He writes:

Paradoxically, markets are, as Adam Smith famously maintained, a civilizing, socializing, and pacifying process—even as they wreak “creative destruction” (as Joseph Schumpeter put it) with remorseless efficiency. In this way, markets make the toleration of differences an economic virtue not just a civic one, and they give their greatest rewards to those who know how to anticipate and promote differences for which people are willing to pay.

Indeed.

In the next three chapters, “Policy Implementation,” “The Limits of Law,” and “The Bureaucracy,” Schuck adds further to the case for government failure, with tight reasoning and multiple examples. Two examples stand out. One is his

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discussion of how the Clean Air Act, by imposing strict standards on new sources of pollution, caused many electric utilities to use their older, dirtier power plants longer. A related example is the Corporate Average Fuel Economy standards for cars and trucks, which cause people to hold on to their older, higher-pollution, fuel-guzzling vehicles longer.

Very seldom does Schuck's political bias show, but one striking case is his discussion, in "The Bureaucracy," of the recent Internal Revenue Service Tea Party scandal. He refers to it as "a rogue IRS unit's targeting of conservative nonprofit groups for discriminatory treatment." Schuck clearly makes the judgment that the IRS unit was "rogue," and not directed from the top. There is more evidence for the latter view now than when Schuck wrote this, but he should not have presumed, as he did, to know the answer.

Finally, in Chapter 11, "Policy Successes," we get to Schuck's case for government. Lined up against his many chapters on many spectacular government failures, his "successes" are relatively weak. He gives nine contemporary examples: Social Security, interstate highways, food stamps, the Voting Rights Act of 1965, the Immigration Act of 1965, the Earned Income Tax Credit of 1975, the Airline Deregulation Act of 1978, the Welfare Reform Act of 1996, and the National Institutes of Health.

To his credit, Schuck is an honest scholar and so, even in making his case that these programs are successful, he points to weaknesses in his own argument. Consider the G.I. Bill. He cites the work of Cornell University's Suzanne Metler, an expert on the G.I. Bill, who argues that "we know little about the actual effect of this program on the individuals who benefited from it." For a number of the other programs, he also gives negatives that offset his positive case. Interestingly, the two programs for which he finds the least downside are not examples of increased government but of decreased government: airline deregulation (which, as the term implies, substantially *reduced* the govern-

ment's role in the airline industry) and welfare reform (which made welfare harder to get and keep).

In his penultimate chapter, "Remedies," Schuck suggests ways to reduce the government's failure rate. His suggestions are underwhelming, as I believe he would probably admit. One of his best suggestions, to deal with the moral hazard that so many government programs create, is "to avoid creating it in the first place." His worst, in my view, is to give politicians who challenge incumbents "access to free [read "taxpayer-financed"] television and mail privileges."

Schuck ends with a short chapter in which he gives his central message about government failure. One great quote sums it up:

The failures are not just random, occasional, or partisan; they are large, recurrent, and systemic. Few are *total* failures—after all, the government's money and authority almost always do *some* group *some* good. But if the relatively small group of winners is powerful enough, the policy failures are that much more firmly entrenched. [Italics in original.] R

Much to Criticize, Much Left Uncriticized

◆ REVIEW BY PIERRE LEMIEUX

Science and technology in the United States rely heavily on the federal government, which funds 57 percent of basic research and a not-insignificant portion of applied research. Through those channels, government supports a large majority of the costs of graduate and post-graduate research—not to mention the 70 percent of research universities that are public institutions.

Michael Teitelbaum, an Alfred F. Sloan Foundation demographer and senior research associate at Harvard Law School, examines the relationship between government and science and technology in his new book, *Falling Behind?* The result is a good book—though it leaves unaddressed some fundamental questions about the status quo.

High flying, hard landings / Teitelbaum shows how the U.S. government's science and technology policy has been marked by groundless scares, nonsensical rhetoric, interest-group politics, stop-and-go instability, and misaligned incentives. He does this in a well-documented, restrained, academic way, which gives much weight to his

PIERRE LEMIEUX is an economist in the Department of Management Sciences of the Université du Québec en Outaouais. His latest book is *Who Needs Jobs? Spreading Poverty or Increasing Welfare* (Palgrave Macmillan, 2014).

stringent criticisms.

Since the end of World War II, politicians and various "experts" have periodically instigated scares to the effect that the United States is falling behind other nations in the science and technology "race," with dire predicted consequences. Perhaps the greatest scare came in 1957 when the Soviet Union launched the first satellite (a space race the U.S. government may have intentionally lost in order to establish the legal principle that surveillance satellites do not violate national airspace). The Sputnik scare was met by the Mercury manned flight program and later by the Apollo moon landing program. Apollo cost \$145 billion (in today's dollars); at its peak, it employed 400,000 Americans. So, for a time, it could be thought that the United States government had closed the alleged science and technology gap.

The lull did not last long. Another big spurge in federal science and technol-

ogy expenditures was fueled by Richard Nixon's "war on cancer," and yet another by Ronald Reagan's defense spending. In 1983, a Reagan administration commission tried hard to provoke a "Sputnik-type occurrence," in the words of then-education secretary Terrell Bell. Schools and colleges, wrote the commission (among other nonsense), are producing "a rising tide of mediocrity that threatens our very future as a Nation and a people." Fortunately, the scare subsided, and the scene became quiet again—for a time.

From the 1990s through the middle of the first decade of the 2000s, a new federal funding explosion benefited biomedical sciences and the National Institutes of Health (NIH), whose budget doubled between 1998 and 2003. Teitelbaum writes:

[T]he episode encapsulates many (if not all) of the elements central to this book: a well-intentioned and passionately written report produced by an eminent scientist that sounds the alarm about prospective deterioration of U.S. leadership in science and technology and its implications for U.S. competitiveness; invocation of forecasts of looming shortfalls of scientists and engineers in the decades ahead; a clarion call for federal funding increases to the levels of the peak years of the Apollo program; successful lobbying efforts contributing to booming but short-lived increases in federal research support for science..., and the emergence of serious funding crises once the years of rapid budget increases ended.

As Teitelbaum eloquently argues, this process of scare-induced spending led to recurrent booms and busts in government funding of science and technology. After each episode, the mere stabilization of federal funding meant that newly trained scientists saw their career opportunities compromised, and universities found themselves with investments and appointments they could not finance. After the doubling of the NIH budget in five years, the subsidies stopped increasing, and biomedical research suffered what was called a "hard landing."

One consequence of the stop-and-go funding was the increasing flow of freshly minted PhDs into low-paying postdoctoral assignments instead of faculty positions. Once the manna stopped, the universities had little money to hire tenured faculty. So postdocs were stuck in the low-paying jobs into their 30s, well past the age when independent and secure scientists often make their seminal discoveries. As James Watson, the discoverer of the structure of DNA, put it with humor, now "you're supposed to wait until you're virtually senile" to begin your own independent research. This is just one way that government science and technology funding has created perverse incentives.

No shortage of lobbying

Contrary to the scary claims, Teitelbaum argues there is little evidence that the United States was ever falling behind anybody in science and technology. The scares were fakes, justified by simplistic prediction models. The American K-12 education system was producing many top-notch students capable of advanced scientific studies, even if the democratization of education lowered the average level of student achievement. Scientists were produced in larger numbers than in any other country. As the second part of the 20th century progressed, the relative position of America receded, because European countries recovered from World War II and, more recently, a few underdeveloped countries—especially China—took off. But the absolute American leadership in science in technology continued.

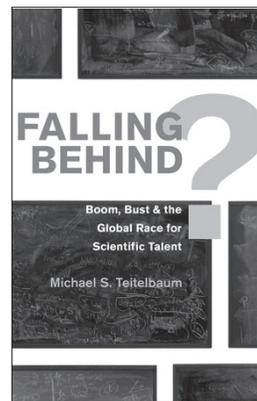
Teitelbaum perceptively notes that the very idea of a supposed shortage of science and technology workers is misleading. If a shortage of scientists develops, it will show in their remunerations, which will be bid up relative to other occupations. As the book well documents, this never happened.

There is no shortage of lobbying for increased science and technology spending, though. Many individuals and institutions have material incentives to launch baseless scares. University departments, where most of the federally funded research is done, have a clear interest in enriching their research budgets and their faculty salaries. "Disease interest groups" (including the public health movement, which Teitelbaum barely mentions) wants money for everything from antismoking programs to obesity prevention campaigns. Bureaucrats themselves have an interest in seeing their budgets and power increase—although perhaps Teitelbaum is too soft on them. Finally, businesses are motivated to scare politicians into providing more visas for the international talents they want to bring to America. Many of the scary "falling behind" reports were produced by committees manned by both university presidents and business executives.

Politicians have a vested interest in generating or riding scares that will increase their power and give them the appearance of being white knights. Teitelbaum quotes a 2010 speech by President Obama: "In the race for the future, America is in danger of falling behind.... [O]ur generation's Sputnik moment is back." The history of science funding is littered with such nonsense. No political party has a monopoly on it.

Not quite critical enough / But as sharp as Teitelbaum's criticism is, it fails to dig deep enough. It does not challenge the very fundamentals of U.S. financing of science and technology.

Take the concept of scientist shortage. The real economic notion of shortage is simply a temporary disequilibrium that will be corrected by changes in quantity supplied and quantity demanded. In value-free economics, a shortage means that



**Falling Behind?
Boom, Bust, and
the Global Race for
Scientific Talent**
By Michael S. Teitelbaum
280 pp.; Princeton
University Press, 2014

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other valued uses are bidding up the price of, say, talented people—instead of becoming lawyers or managers, they will pursue a career as scientists. Economic efficiency requires that the market (not politicians and bureaucrats) handle this shift.

Despite his vast knowledge of his topic and his analytical brio, Teitelbaum may not be as objective and value-free as he appears to be. His argument often looks like a discrete plea for his own preferences—for scientists, especially American scientists. His veiled criticism of immigration, his observation that foreign scientists coming to America depress the remuneration of native scientists, his amalgamation of special interest groups who lobby for subsidies with those who just want more liberty to hire who they want, all suggest that he values the welfare of American scientists—which of course means the welfare of some Americans—more than the welfare of all people. For all his iconoclastic criticism of the political-scientific complex, he still thinks of the market for scientists in terms of an American market, not a world market. At least, that is how I read him.

Looking at the problem in terms of world markets and equal weight of all individuals in world welfare suggests a much more radical criticism than Teitelbaum's. Even supposing that the United States somehow is "falling behind," who exactly is it that is falling behind? It can only be *some* American residents. The real remuneration of U.S. academic mathematicians fell by 8 percent after the immigration of former Soviet mathematicians in the 1990s. Foreign postdocs push down the remuneration of American postdocs. But so what? Other Americans, who are every bit as American as the "falling" scientists, benefit from the inflow of foreign talent.

Public good? / Teitelbaum borrows from economists the concept of public good to justify government subsidization of research and especially basic research. It is not easy for somebody who loves knowledge to argue against that. Even Ayn Rand hailed the success of the Apollo moon

shot—though she probably thought the program could have been financed privately, ignoring the free-rider problem. But precisely because public goods are good (for a large number of people), shouldn't we be happy if they are produced by inexpensive foreigners instead of "our" expensive scientists?

Claims about public goods are often a smoke screen for policies that are really about the good of the state. Why does the state want scientists and engineers? A famous report, produced in 1945 by a science adviser to Franklin Roosevelt, defended government investment in science because the scientists would be "on call in national emergencies." Science and technology, it seems, are the health of the state.

Once we look at economic and political phenomena from the point of view of the individuals involved, instead of invoking holist entities like "the United States" or "the Soviet Union," we are led to a deeper criticism than the one Teitelbaum offers. We realize, for example, that international "competitiveness" is not much more than a simplistic mantra. Why finance some individuals' competitiveness at the cost of depriving taxpayers and consumers of money that *they* could use for their own competitiveness? This sort of question puts us on a different track: why not simply recommend that the state not put obstacles in the path of competitive individuals, rather than fund some competitive individuals at the expense of others?

Absentees / Teitelbaum does incorporate into his book an elementary Public Choice analysis of federal funding of science and technology, but more such analysis would have been welcome. There is a mountain of subsidies to be explained. Despite the stop-and-go federal subsidies, "the overall trend has been one of substantial increase that is well in excess of inflation." But Teitelbaum is concerned with the way the funding is done, not with its continuous growth and current level. He is comfortable with science depending on federal politicians and bureaucrats. He is not blind to the natural mission creep of

government programs, but he tends to underplay the logic of institutions.

Take the problem of lobbying. Teitelbaum does not seem to understand that the problem does not lie in the interests of the lobbyists, but in the big pot of gold that the U.S. government flashes before their eyes. As long as the federal government has hundreds of billions of dollars to give away, special interest groups will go treasure hunting. There is no good analysis or pure intention that will change that. Another important point: we should distinguish lobbyists who are trying to put their hands in the public treasury from those who just want to produce goods that people want at the lowest possible cost.

The incremental solutions that Teitelbaum proposes are very much in continuity with the current system. He argues that federal funding should be smoothed over time so as to avoid booms and busts. Incentives should be tweaked to gain some efficiency. A prediction mechanism should be devised to alert scientists about their future career prospects. In two words, "smart interventions" are needed, as if the designers of the previous ones were stupid.

Overall, the book is interesting, but it has little to say about two very important groups: taxpayers and consumers. They are the ones who have fallen behind because of American science and technology policy. Teitelbaum would reply that the public-good nature of the science produced by federal funding over the past half century has brought net benefits to taxpayers and consumers. As a result, the system is good and everybody should be happy. But given the presence of extended government failures that are much worse than market failures, and given that restraining Leviathan is itself a public good (at least for a large group of Americans), this approach is unsatisfactory.

Teitelbaum would probably reply that those broader issues were not part of his topic. But he could at least have recognized them. He could also have disclosed his own value judgments. His criticism of so much nonsense would have been more complete and more interesting.

Can Macroeconomics Be Saved—or Understood?

◆ REVIEW BY IKE BRANNON

Macroeconomics is currently in crisis, and not for the first time. And Bill Phillips is largely to blame. Phillips' life story—and his contributions to macroeconomics—are front and center in Tim Harford's excellent new book, and for good reason. Besides the outsized role Phillips' research played in the creation of a Keynesian economic model that survived John Maynard Keynes' death, the man's biography is a whale of a story, which Harford succinctly captures.

Phillips lived an incredible life. Besides traveling the world, working an amazing variety of jobs, and performing heroic feats of bravery (and coming within days of perishing before the end of World War II, when he literally dug what was to be his own grave in a Japanese prisoner of war camp), Phillips studied economics at the London School of Economics (LSE) and wowed his mentors. He secured himself an academic post at the school after graduation based largely on his invention of a plumbing contraption, the "hydraulic computer" or "Phillips machine," that ingeniously captured the interconnection between the various macroeconomic markets.

A few years after joining the LSE faculty, he happened to observe that if we plotted the annual data for wage inflation and unemployment on a graph, the data exhibited a stable, inverse relationship: in years where inflation is high, unemployment tends to be low, and vice-versa.

As Harford recounts, Phillips wasn't sure what to make of the statistical artifact and for that reason he was not terribly enthusiastic about publishing his discovery. His colleagues, on the other hand, urged him to get the results out, and he eventually relented.

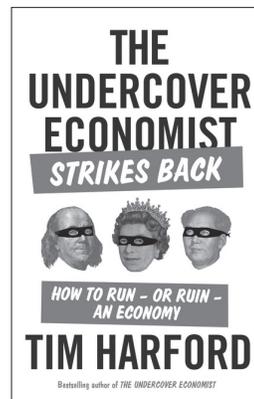
With his paper, Phillips managed to return a *raison d'être* to Keynesian economics that it had been lacking in the postwar years. Keynes's *General Theory* laid out his arguments for using fiscal stimulus in a moribund economy, but it was primarily focused on addressing the Great Depression. In the busy years that followed, which he devoted to crafting a postwar financial system to help jumpstart the reconstruction of Europe and provide some semblance of global monetary stability, Keynes never got around to articulating his thoughts on the proper role of government managing the economy across a normal business cycle environment.

With Phillips' graph, Keynes' adherents had an organizing principle: in order to keep the economy at full employment, a central banker only needed to fiddle with the money supply to inflate away any excess labor.

The exploitation of the inflation-unemployment tradeoff soon became the central tenet of Keynesian economics. We remember the 1960s as a halcyon economic decade with low unemployment and steady economic growth that Keynesians largely attributed to the sagacity of the central bank and its exploitation of the Phillips Curve. At one point, the government journal *Business Cycle Developments*

changed its name to *Business Conditions* because it appeared as if the business cycle had been defeated and steadily growing prosperity was all but inevitable.

Soon afterward, of course, the economic gods punished that hubris. By the early 1970s, the price of lower unemployment was higher and higher inflation, until we saw higher inflation occurring concomitantly with higher unemployment (which came to be called "stagflation") during the 1973–74 recession. That directly contradicted the precepts of the Phillips Curve. Suddenly, macroeconomics (specifically Keynesian macroeconomics; the two were one and the same at the time) was in crisis and economists were looking for a way out.



The Undercover Economist Strikes Back: How to Run—or Ruin—an Economy

By Tim Harford
272 pp.; Riverhead Hardcover, 2014

Rational expectations / Harford crucially notes that Phillips never did offer a rationale for why a tradeoff between inflation and unemployment would exist. Much later, Keynesians came to posit that people had trouble distinguishing between nominal and real wages. As a result, people would see their wages go up, presume that it was a *real* wage increase, and agree to work more hours, or some people on the margin between working and not working would forgo school or leisure and take a job at the higher wage.

The rub is that while nominal wages are rising, the actual amount of goods and services they can obtain with an hour's wage are falling, as wages don't initially keep pace with inflation in this model. Workers essentially are being fooled by the government into working more than they would otherwise do if they knew what was happening.

While Keynesians spent the 1960s congratulating each other, not everyone had jumped onto the Phillips Curve bandwagon. Soon after Phillips published his original paper, an economist at Carnegie Tech named John Muth took issue with

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the concept, suggesting in a series of papers that the idea that the government could systematically fool people by manipulating inflation prices was nonsense. (See “Remembering the Man behind Rational Expectations,” Spring 2006.) Instead, Muth suggested that people form their expectations *rationally*, based on all available data, and offered some data on hog markets that belied the adaptive-price expectations framework the Keynesians had come to rely on. While people might make mistakes from time to time, on average their best guess of inflation in the next year will be the right one. Just as hog farmers cannot afford to make systematic mistakes about prices, it is costly for the rest of us to do so as well.

Muth’s paper went virtually unnoticed its first few years, until his colleague Robert Lucas began chatting with him about it in Lucas’s quest to improve the treatment of labor markets in macroeconomics. Their conversations led to Lucas publishing a paper with Leonard Rapping on rational expectations in macroeconomics just as the Phillips Curve consensus was collapsing and economists were casting about for an explanation.

Rational expectations didn’t say that people would never be fooled by price changes, only that they knew enough to know that the government had an incentive to boost inflation to induce them to work more and would accordingly be on the lookout for it to happen. Hence, for Phillips Curve policy to work, the government would have to hide the intentions of that policy—a trick that can’t work very often, at least not in the way the government would like. It’s for this reason that the Federal Reserve has long operated in an environment of near opacity; complete disclosure makes the Fed’s task more difficult.

Rational expectations won the war: Lucas (and later a key co-author of his, Thomas Sargent) won Nobel Prizes for their work, with Muth missing out mainly because of his eccentric persona and perch at a less-than-prestigious institution. A few economists tried to figure out how to reform Keynesian economics, but the

bulk of the academy embraced rational expectations. Not only did Keynesian economics fail the profession, but its being predicated on some degree of irrationality was at odds with the very notion of a social science. If we can posit theories based on people making systematic mistakes, what on earth constrains the discipline? It’s a conundrum that behavioral economics has had to face as well.

By the 1980s the traditional Keynesian macroeconomic model had fallen out of favor. In most graduate programs in economics, it was discussed merely as an historical artifact, a way station on the road to a more complete and more intellectually coherent perspective on how the world works. This new perspective didn’t entirely eschew the notion that a monetary authority could use the money supply to provide a short-term jolt to the economy, but it suggested other reasons why this might work (rigid labor contracts, for example) and emphasized that this power is much more ephemeral than what the Keynesian model specified.

While the academy largely abandoned the Keynesian purview, it still has its adherents, most prominently among the politicians who treat it much the same as combat soldiers treat religion. In 2001 one of the Bush administration’s arguments for tax cuts was to provide a timely stimulus to an economy in recession—a classic Keynesian prescription. In 2003 Congress accelerated the remaining Bush tax cuts that had yet to take effect, again with a bevy of Republicans arguing that the economy needed a boost in demand to get it going.

And, of course, in 2008 the economy suffered its biggest decline since the Great Depression. The Federal Reserve responded with an unprecedented increase in the money supply. In early 2009 the Obama administration proposed its own \$800 billion stimulus, which met Republican opposition motivated not by a distaste for stimulus but because this particular stimulus was neither targeted nor timely. It’s a notion I feel empathy with every time I walk by the shell of a building that used to house my favorite deli, a casualty of the

stimulus funds given to pay for a remodeling of the building. The money allocated in 2009 led to the deli’s eviction in 2010, with construction beginning in earnest only in mid-2012. As of this summer, the retail space remained uninhabitable.

Collective confusion/ Harford captures the intellectual angst facing macroeconomics: What is it that we are supposed to believe, precisely? Does unemployment remain high almost six years after the last recession began because stimulus wasn’t timely, or wasn’t big enough, or stopped too soon—or do we face more fundamental problems in the economy that stimulus can’t begin to solve?

The book is timely because, unlike during the Great Depression and the stagflation of the 1970s, the present uncertainty within the discipline in no way resembles an existential crisis for the discipline. It’s long been established that while economics and physics may share a common methodology, they are miles apart when it comes to their ability to explain the world, and it is unclear whether we economists have moved the ball forward all that much in recent years. The book is a series of pertinent questions about what happened during the last recession, whether stimulus worked, and what economists of all stripes think should be done, and it is written in a direct, chatty tone that doesn’t make the reader want to throw up his hands.

For hard-core economists who want more than a rehashing of the daily dispute between Paul Krugman and the *Wall Street Journal* editorial page, Harford delves deeply into growth economics in the latter portions of the book. Instead of worrying about stimulating aggregate demand, he examines how we can improve the productive capacity of the economy. It’s a topic that Congress has seemingly lost interest in, which is a real pity: the notion held by a growing number of the commentariat seems to be that economic growth accrues only to the wealthy and the methods by which we obtain it exploit the poor. It’s a destructive perspective that needs to be disposed of by whatever means necessary.

Harford does a commendable job of doing precisely that.

These days, people actually defend policies that increase the cost of doing business (such as onerous regulations and, most egregiously, the minimum wage) as stimulating demand. When it has come to this, it is clear that the precepts of economics constrain no one in pretending economics

supports whatever it is they want to say.

The irony of ironies in the current macroeconomic debate, of course, is that Keynes, the man who sagely observed that most politicians are in the thrall of some defunct economist, now happens to be that very entity. With this book, Harford has done yeoman's work to beat those economic fallacies into submission. **R**

The Man of System's Fatal Conceit

◆ REVIEW BY ART CARDEN

William Easterly's eagerly awaited *The Tyranny of Experts* is several things: It is an intellectual history of development economics. It is a sweeping discussion of why some institutions work while others do not. It is a critique of the philosophical assumptions of aid-and-development officials who view development as a non-ideological and scientific discipline that is done by experts and to an undifferentiated and homogeneous lump of blood and flesh called "the poor." It is intellectual comfort food for people (like me) who are skeptical of the idea that the only things standing between us and a world free of poverty are insufficient funding and political will. Finally, it is a call for humanitarians and members of "the development community" to recognize their own limitations and take the rights and capabilities of the world's poor as seriously as they take their own.

Easterly documents and discusses three major errors in thinking about development:

- thinking of societies as social "blank slates" on which new stories can be written and with histories that can be safely ignored
- emphasizing "the well-being of nations" rather than the well-being of individuals

ART CARDEN is an assistant professor of economics at Samford University's Brock School of Business, senior research fellow with the Institute for Faith, Work, and Economics, research fellow with the Independent Institute, and senior fellow with the Beacon Center of Tennessee.

- privileging "conscious design" rather than "spontaneous solutions"

In contrast to development-as-social-engineering, he emphasizes the importance of history and the context, individual rights, and problem-solving characteristics of decentralized orders. He does this by exploring the intellectual history of development economics, and he applies his insights to studies of Latin America, Africa, and the Far East.

Condemning the man of system/

In chapters that remind me of Thomas Leonard's research on economists in the eugenics movement, Easterly lays bare the sometimes-explicit racism of western immigration policies (the Chinese Exclusion Act, for example) and development initiatives. In this view, development is not something that happens in a world rich with nuance and cultural context. It

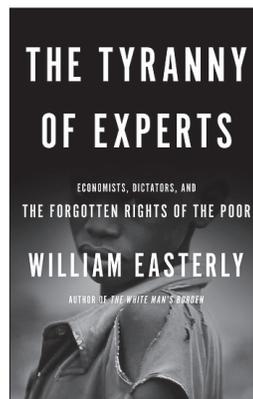
is something that is done *to* poor (and perhaps inferior) people *by* technocrat-advised and benevolent autocrats, against the poor's will but for their ultimate good.

Or so it might seem. The rights and agency of the poor were swept aside in the name of fulfilling what Thomas Sowell might call "The Vision of the Anointed"—a vision of a good society, though why it is good we do not know—that would emerge from the plans of technocrats backed by the force of autocrats. The planners sometimes sound like villains out of *Atlas Shrugged*. Consider, for example, this passage from Wu Ding-chang's lecture "International Economic Cooperation in China": "With such a Commission working on a comprehensive, scientifically formulated, progressive and practical plan of economic development, public support and ultimate success are assured."

"The technocratic illusion" that poor countries lack the expertise and political will necessary for development stands at odds with what Easterly identifies as "the real cause of poverty: the unchecked power of the state against poor people without rights." Those rights, Easterly emphasizes,

are important as "moral ends in themselves." They are not inconvenient "barriers" to be trampled and discarded in the pursuit of technocrats' goals. He puts it as follows: "The technocratic illusion is that poverty results from a shortage of expertise, whereas poverty is really about a shortage of rights." Through their emphasis on government planning as a solution to dire poverty, technocrats (perhaps unwittingly) legitimize violations of poor people's rights by making them secondary to the planners' goals. Easterly takes particular issue with the philosophical underpinnings of technocratic solutions.

"Development" in this view is "a technical question with technical solutions," where it is assumed that rights are of secondary



The Tyranny of Experts: Economists, Dictators, and the Forgotten Rights of the Poor

By William Easterly
416 pp.; Basic Books, 2014

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importance because those being developed prefer a full belly to legal, political, and financial autonomy.

At its core, *The Tyranny of Experts* is a condemnation of the vision Adam Smith associated with “the man of system” and what Friedrich Hayek called “the fatal conceit.” In *The Theory of Moral Sentiments*, Smith gets to the heart of the same issue Easterly addresses:

The man of system ... is apt to be very wise [to] his own conceit; and is often so enamoured [sic] with the supposed beauty of his own ideal plan of government, that he cannot suffer the smallest deviation from any part of it. He goes on to establish it completely and in all its parts, without any regard to the great interests, or to the strong prejudices which may oppose it. He seems to imagine that he can arrange the different members of a great society with as much ease as the hand arranges the different pieces upon a chess-board. He does not consider that the pieces upon the chess-board have no other principle of motion besides that which the hand impresses upon them; but that, in the great chess-board of human society, every single piece has a principle of motion of its own, altogether different from that which the legislature might chuse [sic] to impress upon it. If those two principles coincide and act in the same direction, the game of human society will go on easily and harmoniously, and is very likely to be happy and successful. If they are opposite or different, the game will go on miserably, and the society must be at all times in the highest degree of disorder.

Easterly uses different language and does not (to my recollection) use this quote explicitly, but he traces the man of (development) system’s intellectual genealogy and documents some of his adventures in Africa, Asia, and Latin America. He explores a theme that has permeated Christopher Coyne’s work on military intervention (his 2007 book *After War*) and humanitarian intervention (his 2013 book *Doing Bad by Doing Good*, in which he

explicitly criticizes “the man of humanitarian system”). Easterly’s discussion is a fine complement to Coyne’s work, which is in turn a fine complement to Easterly’s earlier books *The Elusive Quest for Growth* (2003) and *The White Man’s Burden* (2006).

Economics *as such* is a value-free endeavor. It tells us what the effects of a particular action or policy might be, but it can’t tell us which actions are right and which actions are wrong. Easterly’s invoca-

If we should do anything, we should remove restrictions on mobility for goods, labor, and capital so that people can cast their nets in the best waters.

tion of the rights of the poor is particularly important as “non-ideological, evidence-based” solutions to the problems of poverty nonetheless rely on an implicit moral framework. Easterly forces us to reckon with this by noting that rights violations and moral outrages happening under the auspices of “development” and that would be unthinkable in, say, Ohio can go uninvestigated and unpunished in poor countries.

The book is not without its faults, but they are very minor. I was surprised that Easterly referred to Daron Acemoglu, Simon Johnson, and James Robinson as “pioneers in reintroducing historical research into economics, with the aim of explaining economic development.” I think Acemoglu, Johnson, and Robinson themselves would admit that they are standing on the shoulders of giants like Douglass North and others who have been using “historical research ... with the aim of explaining economic development” for a long time. This is a nit-picky matter of interpretation, though, and not a serious problem with the overall argument. Perhaps a better way to put it would be to credit Acemoglu, Johnson, and Robinson with making the rest of the economics profession aware of a rich research tradition.

About three-quarters of the way through the book, Easterly discusses James

Watt’s steam engine and the role of patents in fostering innovation. Easterly notes that the “conventional wisdom,” which says that “patents are the main or only way the West solved the inadequate incentives for invention problem,” is incorrect because short-run monopoly profits can stimulate innovation. Easterly’s discussion here would have benefited from an engagement with Michele Boldrin and David Levine’s argument that intellectual property rights

“are an unnecessary evil” that “[do] not increase either innovation or creation.” As it stands, Boldrin and Levine’s *Against Intellectual Monopoly* is uncited in *The Tyranny of Experts*, which is unfortunate because of the role

of debates about intellectual property law in international trade agreements. These are not crippling weaknesses and they do not harm his central argument; if anything, they can be cleared up with a few words in a second edition.

You’ve probably heard the proverb, “Give a man a fish and he’ll eat for a day; teach a man to fish and he’ll eat for a lifetime.” The man of system’s fatal conceit is this: he truly believes the problem facing poor people is that they don’t know how to fish, and this can only be remedied by his intervention. As the work of Elinor Ostrom and so many others has shown, however, people in poor countries do know how to fish, and in light of their knowledge about what Hayek called “the particular circumstances of time and place,” they almost certainly know better than we do. As Easterly documents, the best thing we can do for the world’s poor isn’t to teach them how to fish because they probably already know how to do that. If we should do anything, we should remove restrictions on mobility for goods, labor, and capital so that people can search for and find the best waters in which to cast their nets.

We flatter ourselves when we think we can intervene advantageously in others’ lives. It wouldn’t be so tragic if real, flesh-and-blood people weren’t the ones paying the price for our arrogance. R

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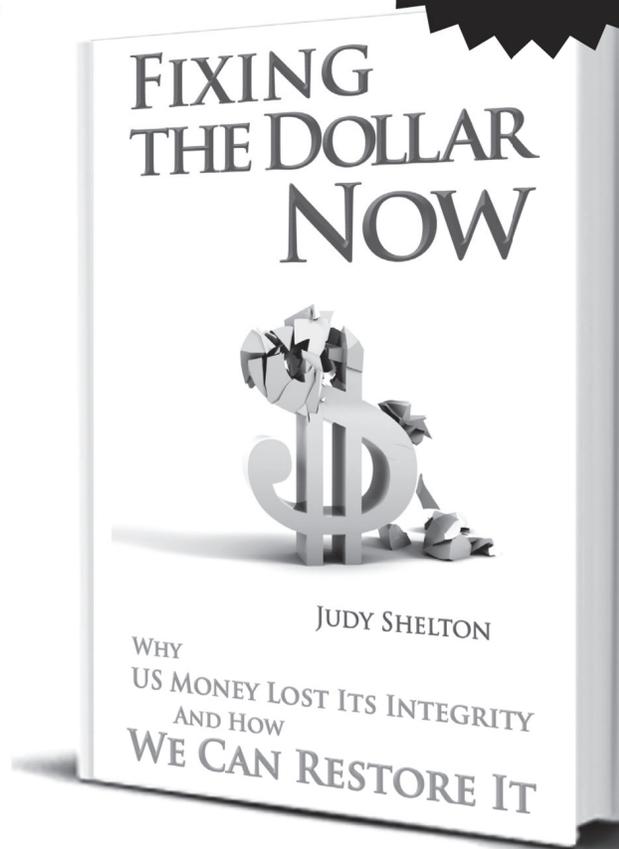
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Working Papers BY PETER VAN DOREN

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Housing Prices

“Supply Constraints Are Not Valid Instrumental Variables for Home Prices because They Are Correlated with Many Demand Factors,” by Thomas Davidoff. February 2014. SSRN #2400833.

During the early and mid 2000s, housing prices increased dramatically in California, Arizona, Nevada, and Florida—but not in Texas. The conventional explanation for this difference is that the right to build housing (i.e., the securing of zoning and other regulatory approvals) is in short supply in the former states, and thus demand increases result in housing price increases rather than increases in the quantity of houses at stable prices. (See “Zoning’s Steep Price,” Fall 2002.) Even though the resulting housing prices are well above the marginal cost of new construction, new supply is not forthcoming because the legal rights to build are difficult to obtain. In contrast, in the absence of zoning restrictions in places like Texas, even if too many resources are allocated to housing through either market forces or misguided policy, the result will be just more housing rather than a bubble in housing prices.

In my first “Working Papers” column (Summer 2010), I described a paper by Thomas Davidoff from the University of British Columbia Business School that dissented from the view that housing price increases were largely the result of supply restrictions. He demonstrated that metropolitan areas with a history of low price and large supply appreciation in the past had a boom-and-bust price pattern in the 2000s that did not differ from metropolitan areas that had a history of large price appreciation with little supply increase. He argued that this lack of difference in pricing behavior cast doubt on the role that supply constraints (natural or regulatory) played in the housing bubble.

In this new paper, Davidoff critiques the methodology that economists use to conclude that the housing bubble was the result of supply constraints. Typically economists regress the change in housing prices over some time period against one of two measures: the Wharton Residential Land Use Regulatory Index (WRLURI) or a Wharton-developed measure of the amount of land that cannot be developed in a metropolitan area because of characteristics like a steep slope, unsuitable soil, or the presence of wetlands and bodies of water. A positive coefficient on such variables is thought to be sufficient evidence of a supply constraint effect on prices.

Davidoff replicates such a regression of price changes (the ratio of the highest subsequent sale price relative to the 2000 price by metro area) on the Wharton measures across metropolitan areas. He finds that those cities with a one-unit-higher value of the index than average (more restrictions or less developable land) had a 20

percent increase in prices during the boom. He then estimates a regression of quantity changes (the ratio of 2009 to 2000 housing units) on the Wharton index and finds no effect.

Why are price increases explained by the index but not housing supply changes? Davidoff argues that the results can be reconciled if demand growth and supply constraints are correlated. That is, increases in the regulation of housing supply are themselves caused by demand growth. He writes that more desirable locations are more developed, inhabited by people more inclined to favor government intervention, and thus more regulated. The market value of environmental amenities, such as lots on hills with an ocean view, has increased as people have become richer. In turn, the people who live there have acted politically to “preserve” those amenities. Thus, the alleged measures of supply constraint are actually contaminated measures of intense demand fueled by large increases in real income as well as scarce developable land and the regulatory constraints that accompany desirable places.

Paid Maternity Leave

“What Is the Case for Paid Maternity Leave?” by Gordon B. Dahl, Katrine V. Loken, Magne Mogstad, and Kari Veia Salvanes. October 2013. NBER #19595.

This paper assesses the effects of extending publicly financed maternity leave. For their test case, the authors examine Norway, which expanded its maternal leave benefit from 18 to 35 weeks in a series of steps in the late 1980s and early 1990s. While on leave, the mother receives 100 percent of her wage through the program. In 1992, when the 35-week benefit was fully implemented, the program cost roughly 0.5 percent of Norway’s gross domestic product. So what did the taxpayers gain for their money?

The study uses a research discontinuity design comparing results for those born just before the eligibility expansion date with those born just after—the equivalent of random assignment. The design of the Norway expansion makes the program an almost ideal test case. The specific timing of each step increase (two weeks in 1987, two weeks in 1988, two weeks in 1989, four weeks in 1990, four weeks in 1991, and three weeks in 1992) was not announced until less than nine months before implementation to prevent strategic conception, and the data offer no evidence of strategic delivery to take advantage of the extended benefit. In addition, there is no possibility of sample selection problems because the take-up rate among those eligible was 100 percent.

The authors conclude that the program had no effect on a wide variety of outcomes: test scores after 9th grade, high school graduation rate, total years of maternal employment, and parental income. In addition, because there was a minimum earnings

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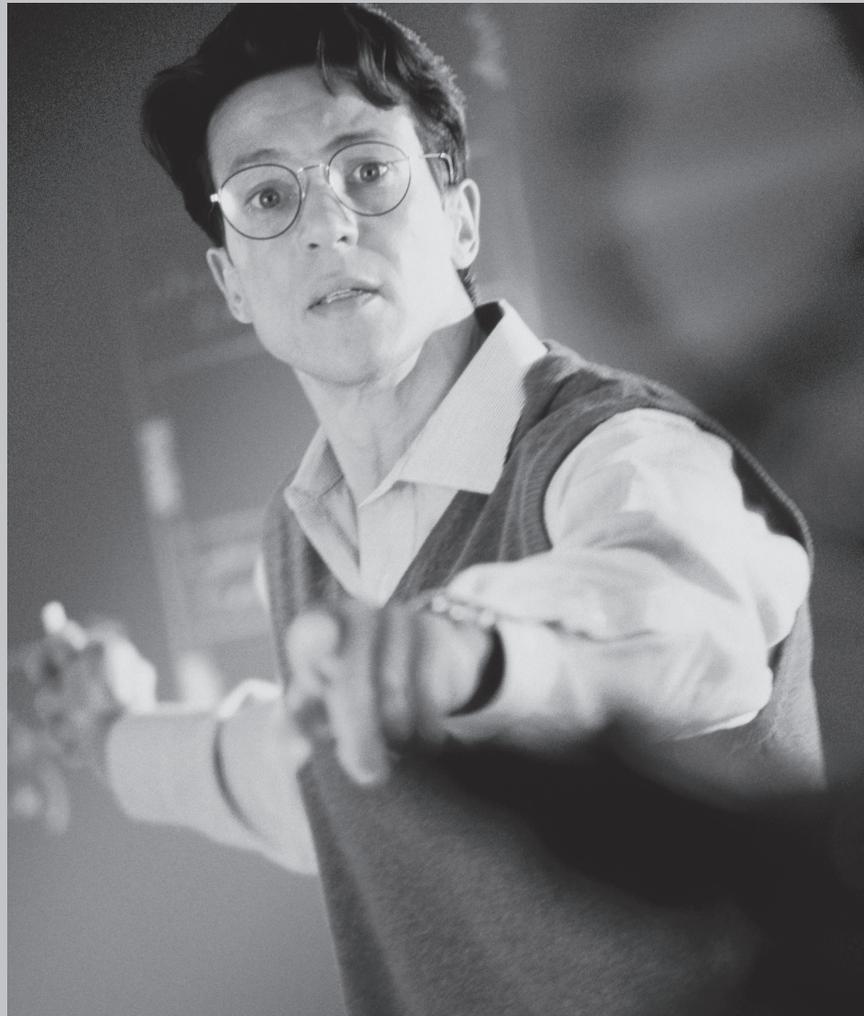
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requirement to receive the benefit, only 74 percent of mothers were eligible and were more affluent than the population of all mothers. The extensions in paid maternal leave raised taxes, had no observable effects on socially important outcomes, and redistributed Norwegian wealth to the affluent.

Occupational Licensure

“Relaxing Occupational Licensing Requirements: Analyzing Wages and Prices for a Medical Service,” by Morris M. Kleiner, Allison Marier, Kyoung Won Park, and Coady Wing. February 2014. NBER #19906.

Morris Kleiner has studied the economics of occupational licensure extensively (see “A License for Protection,” Fall 2006, and “Working Papers,” Fall 2011). In this paper, Kleiner and coauthors examine the effect of variation across states in the supervisory requirements of nurse practitioners. In states that require nurse practitioners to be supervised by doctors and do not allow independent prescription writing, nurse practitioner wages are 14 percent lower, physician wages are 7 percent higher, and fees charged for health care services are 3 to 16 percent higher. In states that allow nurse practitioners to practice independently and write prescriptions, the fees charged for services are lower while health care quality (as measured by changes in the infant mortality rate and malpractice insurance premiums) is not affected. Regulations that restrict the ability of nurse practitioners to provide lower-cost routine medical services reduce their income and increase the income of their competitors as well as the prices of medical services.

Banking and Antitrust

“Antitrust and the Financial Sector—with Special Attention to ‘Too Big to Fail,’” by Lawrence J. White. April 2014. SSRN #2418954.

Financial analysts from diverse perspectives have argued that the Too Big To Fail (TBTF) banks must be made smaller in order to prevent a recurrence of the financial crisis in the fall of 2008. Lawrence J. White, who directed economic analysis in the Department of Justice’s Antitrust Division in the early 1980s and had a bird’s eye view of the savings and loan crisis in the mid-1980s as a member of the Federal Home Loan Bank Board, has written a paper that asks whether there is an antitrust issue lurking in the lessons from the last financial crisis.

He argues that antitrust should concern itself exclusively with issues of market power and that the characteristics of TBTF financial firms that worry analysts have nothing to do with market power. The firms are opaque, thinly capitalized structures whose creditors can “run”—that is, try to withdraw their money, leaving the banks insolvent and nonfunctioning. But notice that “market

power” is nowhere to be found on the list of characteristics that identify TBTF banks; rather, those characteristics focus simply on how integrated the banks are in the broader financial system. Thus, for White, TBTF has nothing to do with antitrust. Instead, TBTF is the result of subsidies and negative externalities that should be dealt with directly rather than through antitrust action.

Electricity Regulation

“When Does Regulation Distort Costs? Lessons from Fuel Procurement in U.S. Electricity Generation,” by Steve Cicala. October 2013. SSRN #2336558.

Electricity regulation and its consequences have faded from public view in recent years. To refresh your memory, federal deregulation of interstate wholesale electricity transactions in the early 1990s and the subsequent increase in cheap natural-gas-fired generation resulted in large differences between wholesale and retail electricity prices in the urbanized coastal areas of the country. Large industrial customers wanted direct access to the cheaper wholesale prices and threatened to invest elsewhere unless they could access the lower spot electricity prices. In response, California and states in the U.S. Northeast “deregulated” the generation of electricity in the late 1990s.

California lowered and froze retail electricity rates from 1996 through 2002 and did not allow any increase for changes in the price of fuel. In the winter of 2000–2001, a draught-induced reduction in hydropower from the Pacific Northwest combined with an increase in natural gas prices to produce wholesale prices that were higher than the frozen retail prices. The resulting shortages and blackouts discredited electricity deregulation in the public’s mind even though they were the result of the retail rate freeze interacting with a deregulated wholesale market. Since then, no state has deregulated its electricity market and many states have reverted to traditional rate regulation.

Even though electricity deregulation is no longer being actively considered anywhere, economists continue to utilize the variation in generator regulatory status across states to study its effects. In this paper, the author employs a difference-in-differences methodology comparing the behavior of generators that were deregulated with the behavior of generators in close geographic proximity but in states that were not deregulated. He finds that deregulated generators reduced the price they paid for coal by 12 percent relative to counterfactual generators in states that continued cost-of-service regulation.

In addition, those coal generators in regulated states installed costly scrubbers to comply with sulfur emissions regulations, while deregulated generators simply switched to burning low-sulfur coal from Wyoming’s Powder River Basin. Cicala argues that outcome supports the Averch-Johnson theory of regulation, which argues that rate-of-return regulation induces more—rather than less—

capital-intensive production methods (scrubbers rather than low-sulfur coal) because of the guaranteed rate of return on investment.

In contrast to the findings for coal-fired generators, Cicala finds no difference in the price paid for natural gas between regulated and deregulated states. Coal and natural gas procurement are affected differently by regulation because of differences in the asymmetry of the information available to generators and regulators. Natural gas is a homogenous commodity sold in open, transparent markets, while coal is a heterogeneous commodity whose characteristics must be matched with the capabilities of generators' boilers and is sold through private bilateral contracts. Regulators are less able to infer whether a coal generator's expenses are justified.

The savings documented by Cicala are true social welfare gains and not just the result of a transfer of rents from coal mines to utilities. The deregulated generators buy coal from mines that require 25 percent less labor and pay 5 percent higher wages.

Telecommunications Spectrum Allocation

"Next Generation Spectrum Regulation: Price-Guided Radio Policy,"
by Kenneth R. Carter. April 2014. SSRN #2422340.

In 1959, Ronald Coase proposed that the creation of property rights and the use of auctions be employed to allocate electromagnetic spectrum. In 1994, the FCC held its first auction for cell phone spectrum. Since then, 87 auctions have been held for various types of spectrum, but administrative rather than market decisions still play a prominent role in spectrum allocation. Bandwidth, signal power, and bandwidth borders are all bureaucratically determined and standardized before auctions are held.

The physics of transmission result in tradeoffs between bandwidth and power for a given level of information transmission capability (bits per second). Because of the standardized choices made by the Federal Communications Commission prior to current auctions, numerous efficiency-enhancing possibilities are eliminated before the current auctions even take place. Carter proposes that bandwidth, power, and level of interference all be variable rather than standard and describes the process by which computer simulation routines could solve the spectrum optimization problem. R

ERRATUM

Because of a terminology error, the Spring 2014 article "The Next Banking Crisis," by Charles W. Calomiris and Stephen H. Haber, incorrectly describes a recently issued final rule on Qualifying Mortgages. The text states that such mortgages have a "total-debt-to-income ratio limit of 43 percent"; in fact, that is the limit of the ratio of debt service to income.

Regulation

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