

States of Fear

Reviewed by Susan Dudley
and Eileen Norcross

THE FRANKENFOOD MYTH: How Protest and Politics Threaten the Biotech Revolution

By Henry I. Miller and Gregory Conko

230 pages; Westport, Conn.: Praeger Publishers, 2004

MICHAEL CRICHTON'S *State of Fear* may make a better movie, but Henry Miller and Gregory Conko's book *The Frankenfood Myth* is an equally interesting, though nonfictional, saga of the battle between hyped-up fears and rational science. The book will likely leave readers disillusioned about the ability of the political process to distinguish between the two.

Frankenfood details, with care and depth, how the promise of gene-splicing technology has been all but dashed by zealous activists, misguided public policy, and irrational fears. The authors explore why the new biotechnology remains the object of fear and government prohibitions, despite three decades of research and commercial activity that have safely used genetically modified agricultural crops.

And they do so with attitude. The authors do not pull any punches, sharply criticizing individuals and organizations that oppose the new biotechnology. For example, the book calls Louisiana regulators' decision to require monitoring of an innocuous recombinant DNA-modified soil bacterium "nincompoopery of the first order" and decries the "politically correct neocolonialism" of Europeans and their "overfed, overcompensated chums at the UN."

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Among the harsh attacks, though, lies a careful and thorough examination of the science, economics, history, and law related to biotechnology that is almost encyclopedic in its detail.

The authors certainly have the credentials to provide a detailed critique of the science and politics of the new biotechnology. Henry Miller is an M.D. who spent 15 years as a career employee in the U.S. Food and Drug Administration, advising the commissioners on biotechnology policy. He was a thorn in the sides of the overzealous regulators at the Environmental Protection Agency and U.S. Department of Agriculture then, and he has not let up since leaving the government for the Hoover Institute where he is now a research fellow. Gregory Conko is a senior fellow at the Competitive Enterprise Institute where he has studied regulatory policy and food safety regulation for nearly a decade. He is also a cofounder and vice president of the AgBioWorld Foundation, an Auburn, Ala.-based nonprofit that disseminates news and scholarship on plant science, biotechnology, and sustainable agriculture.

THE 'CONTINUUM' Why has gene-splicing aroused such fear? The new biotechnology emerged in 1973 during the early years of the environmental movement when Stanley Cohen and Herbert Boyer cultivated a new organism by splicing the DNA of one species of bacteria into the DNA of another. This high-tech crossbreeding, known as recombinant-DNA technology or gene-splicing, was later used to improve the hepatitis B vaccine and heighten plant resistance to insects, diseases, and frosts. The applications are seemingly endless: vitamin-A enriched rice, slow-ripening tomatoes, pest-resistant corn, and oil spill-eating bacteria. What makes the technology so limitless is that biologists and plant breeders can identify and transfer single genes that encode for specific traits, rather than relying on traditional trial-and-error methods of conventional biotechnology.

It should have been a boon to the Green movement—higher crop yields using less arable land and fewer pesticides, the ability to feed people in less developed countries with cheaper and more nutritious foods, improved vaccines and applications to help clean the environment. Instead, though medical applications show promise, agricultural and environmental applications have foundered.

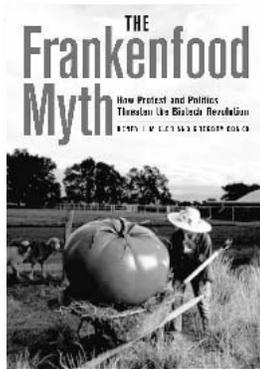
The authors carefully walk us through the origins of biotechnology and its regulation in the United States and internationally, correcting common misconceptions and making a persuasive case for science-based, common sense public policy.

Miller and Conko persuasively argue that the "new biotechnology" is just the latest development in a continuum of man's efforts to improve his surroundings. When people first cultivated plants and domesticated sheep, cattle, pigs, and

chickens, they were engaged in biotechnology. When they began to make wine, beer, bread, yogurt, and cheese, they unknowingly invented microbial biotechnology. For several millennia, practitioners of this traditional biotechnology made progress by searching for desirable traits, or phenotypes, among natural and cultured populations of plants, animals, and microbes, selecting the organisms expressing those traits, and cross-breeding to recombine the genes associated with those traits.

Miller and Conko emphasize that the degree of government scrutiny should be based on the characteristics of the resulting product rather than the process used to derive that product. They carefully and methodically debunk the myths that recombinant DNA techniques are fundamentally new or discrete; unsafe, untested, or unpredictable; or likely to give rise to dangerous pathogens, "superweeds," or other nasty outcomes.

Though their harshest critiques are aimed at the European Union and its precautionary policies, the authors present a



thorough and damning review of U.S. agency attempts to gain control over the research and applications of new biotechnology techniques. Political science and public choice scholars will recognize the classic bureaucratic behavior of regulators at the EPA and USDA as they attempt to increase their authority and control over the technology.

Readers get an insider's view of the maneuvering that went on in the 1980s and 1990s because Miller was a key player at the FDA during that period. He tells of how the FDA decided to regulate gene-spliced pharmaceuticals and foods the same way it regulated their conventional counterparts, while the EPA and USDA identified "gaps" in their regulatory framework that they feared would leave the new biotechnology inadequately regulated. The EPA and USDA decided to

impose stringent case-by-case review of products developed with the new biotechnology, while continuing to apply existing regulatory frameworks to products developed with the less precise, pre-recombinant DNA genetic techniques.

While the authors are correct that the FDA has generally treated products of the new biotechnology in a similar manner to products generated with conventional technologies, that is damning with faint praise. The FDA's regulatory authority already required case-by-case review of new products. Its policies may not discriminate against the recombinant DNA techniques, but when new pharmaceuticals can take an average of eight years to reach consumers, those policies should not be held up as a model. Nevertheless, 20 years after the United States issued the "Coordinated Framework" for regulating biotechnology, it does appear that pharmaceutical applications have been less encumbered by regulators than environmental or agricultural applications.

STATE OF FEAR? While Miller and Conko's book may never make the best-seller list like Crichton's novel, Barron's honored it by including *The Frankenfood Myth* on its list of the "25 Best Reads of 2004." There are some fun similarities between *Frankenfood* and *State of Fear*. Crichton's fast-paced novel takes readers on an

international adventure with a team of scientists who are racing to stave off environmental disasters of huge proportions. The twist is that the villains of the story are environmental extremists diabolically engineering catastrophes designed to keep Americans in a state of fear over the threat of global warming. Like *Frankenfood*, *State of Fear* is peppered with footnotes supporting statements in the text, and both books decry how activists and politicians are trampling freedoms and harming welfare, all in the name of public safety.

Frankenfood is nonfiction, but it has vil-

Miller and Conko are on a crusade to correct misconceptions and myths that threaten the biotech revolution.

lains, too, like the southern African governments who denied gene-spliced corn to their starving populations and unprincipled scientists who offer faulty research to suggest that genetically modified crops are toxic. The book begins with the sad story of Zambia and Zimbabwe in the fall and winter of 2002–2003. Faced with famine and 2.5 million citizens at risk of starvation, the two southern African governments refused to allow the distribution of corn donated by the United States because it may have contained trace kernels of gene-spliced plants. Though the gene-spliced corn was widely consumed in the United States, Zambian President Levy Mwanawasa declared at a UN gathering, "We would rather starve than get something toxic." Eventually, the starving citizenry stormed the locked warehouses to "liberate" the corn.

Miller and Conko also tell the story of Greenpeace and the "purloined seeds," in which the organization intercepted a package of rice seed that had been genetically altered for improved insect resistance. The seeds were en route from Switzerland, where they had been developed, to the Philippines, where they were to be tested for the ability to increase yields using less chemical pesticide. Greenpeace surreptitiously swapped the gene-spliced seeds for normal rice. This may sound like a harmless prank until you consider that in the

Philippines rice is a staple food. Insects and pests are a problem. The insect-resistant rice would have reduced the hazards Filipino farmers face when hand-spraying pesticides with little to no protective gear.

The authors decry the "Big Lie" that genetically modified organisms are new and require the most stringent regulation possible. Greenpeace, in this case, argued that the "export of genetically manipulated organisms needs to be even more tightly regulated than the export of toxic wastes."

Miller and Conko's criticisms are not only reserved for governments and activist organizations; biotechnology and packaged food companies are villains in this tale as well. Like 20th century bootleggers who benefited from laws that banned the sale of liquor on Sundays, the biotech firms benefit from

tighter regulation of their products because it keeps competitors (academic researchers and small innovators) out of the market. (See "The Biggest Pest of All," Summer 2004.) Bruce Yandle, in his famed 1983 *Regulation* article, argued that modern special interests, like the bootleggers, need to use public interest stories to justify their efforts to obtain special favors. The Baptists, who supported the Sunday ban on liquor sales on moral grounds, provided that public interest support. While the Baptists vocally endorsed the ban on Sunday sales, the bootleggers worked behind the scenes and quietly rewarded the politicians with a portion of their Sunday liquor sale profits. (See "Bootleggers and Baptists," May/June 1983.)

Of course, every good bootlegger-and-Baptist story also must have its political villain, and *Frankenfood* details how U.S. and EU bureaucrats and politicians have gained power and money at the expense of consumers, all in the name of public safety. By exaggerating potential risks and ignoring potential benefits of the new biotechnology, they instill fear over genetically modified products in the minds of the public.

One of the characters in Crichton's book, the eccentric Professor Hoffman, argues that Western nations maintain social control through fear. After the

Cold War, environmental fears filled the void left by fears of communism and nuclear attacks. With the military-industrial complex no longer the primary driver of society, the fictional professor claims the “politico-legal-media complex” (PLM) has taken its place. The PLM is “dedicated to promoting fear in the population—under the guise of promoting safety” he says.

The PLM is certainly evident in Miller and Conko’s tale. Ironically, two of Crichton’s earlier best sellers, *The Andromeda Strain* and *Jurassic Park*, may have fueled the PLM when it comes to biotechnology. Indeed, *Frankenfood* pokes fun at “Cassandras” who warn that “the use of gene-spliced organisms will run amok and lead to Andromeda Strains and Jurassic Parks.” Crichton’s views seem to have matured since the time when he wrote those technophobic thrillers. He spent the last three years reading environmental texts, and at the end of his most recent book, he concludes:

Most environmental “principles” (such as sustainable development or the precautionary principle) have the effect of preserving the economic advantages of the West and thus constitute modern imperialism toward the developing world. It is a nice way of saying, “We got ours and we don’t want you to get yours, because you’ll cause too much pollution.”

Indeed, this “modern imperialism” is evident in the Frankenfood debate. The EU appears to have been behind Zimbabwe and Zambia’s refusal to accept the shipment of bio-engineered U.S. corn. Toxicity was only one of the concerns of the African governments. A greater fear was that some of the seeds might have ended up in the hands of farmers who would cultivate the corn and sell it to the European market, incurring penalties or sanctions.

PRECAUTIONARY PRINCIPLE As gene-splicing was being refined in the 1970s, a new concept called “the precautionary principle” emerged from the environmental lobby. The purpose of the precautionary principle is “to impose early preventive measures to ward off even those risks for which we have little or no basis on which

to predict the future probability of harm,” and variants of the principle have been formally adopted in several European countries. (See “Another Look at Biotech Regulation,” Spring 2004.)

In his “author’s message” at the end of *State of Fear*, Crichton observes:

The “precautionary principle,” properly applied, forbids the precautionary principle. It is self-contradictory. The precautionary principle therefore cannot be spoken of in terms that are too harsh.

Miller and Conko’s discussion of the precautionary principle as it is applied to the new biotechnology is harsh. It is also carefully documented and convincing. “Few issues,” they argue, “have proven to be a more contentious battleground over the precautionary principle than the creation, testing, and use of gene-spliced plants.” Despite widespread evidence (that they document carefully) that plants produced with the new biotechnology do not pose unique risks compared to conventionally produced plants, “virtually all domestic and international environmental regulations treat gene-spliced plants and microorganisms in a discriminatory, overcautious fashion, based solely on the relative ‘newness’ of their production methods.”

The trouble with the precautionary principle is that it ignores the risks that would be reduced by a new technology and focuses only on the potential risks it might pose, creating an almost insurmountable bias against trying anything new. (See “The Paralyzing Principle,” Winter 2003.) “Although choosing or using any one technology may lead to an increase in risk along one axis, avoiding it may lead inexorably to an increase in risk along another,” Miller and Conko observe. They recognize that “adding the precautionary principle into the public policy mix only exaggerates regulators’ already pronounced propensities.”

It was just such precaution that led several EU countries to block the EU’s approval of all new gene-spliced crop varieties in the late 1990s. Though the EU lifted the informal moratorium in May 2004, it implemented new, stringent regulations for approval, along

with a rule requiring all gene-spliced products to be labeled and traced.

To illustrate how onerous the traceability requirement is, Miller and Conko describe the regulatory fate of ketchup. If the condiment contains gene-spliced tomatoes, vegetable oil made from three gene-spliced canola varieties, and corn syrup from a dozen different varieties of corn, the processor, packager, and retailer are required to track 16 different ingredients and do the same for every product they receive from the United States or sell in Europe. Consider all the places such basic ingredients travel, and the requirement is impossible to meet and certain to drive genetically modified foods off the Continent. (Interestingly, the rules grant an exception for EU-produced cheese and beer.)

The traceability rule is part precautionary principle and part protectionism. And it is in keeping with the spirit of other recent EU policies. The EU is set to make official a chemicals policy that will require thousands of chemicals produced, imported, or used in the European Union to be subject to a battery of testing and registration requirements. Many of the chemicals in question have been in use for over a century. Again, driven by the precautionary principle, the policy is premised on the fear that chemicals pose unproven hazards to human health and the environment.

According to the authors, the EU acknowledges the traceability rule is a prohibitively costly policy and the fear of gene-spliced foods is irrational. In spite of hundreds of thousands of field tests as well as peer-reviewed research papers, no evidence indicates the presence of any unique environmental or health risks from the products of gene-splicing.

CLIMBING OUT Miller and Conko leave us on a positive note. In their final chapter, they recommend common-sense reforms that can help us climb out of the quagmire over gene-splicing that we have fallen into over the last two decades.

At one point, they ask if their recommendations are:

Uncompromising? Aggressive? Yes, but so is the virtual annihilation of entire areas of research

and development, trampling of individual and corporate freedom, disuse of critical technology, and disruption of free trade.

Like Professor Kenner, Crichton's hero in *State of Fear*, Miller and Conko are on a crusade to correct misconceptions and myths that threaten the biotech revolution. We can almost imagine them,

dressed like Indiana Jones, averting disaster while spouting scientific facts with unabashed political incorrectness.

For those who cannot wait for Crichton to novelize the genetic revolution and are interested in understanding the reasons agricultural biotechnology has not lived up to its potential and what policies are needed to change that, we join Barron's in recommending *The Frankenfood Myth*. **R**

A Coddling CEA?

Reviewed by Ben Lieberman

PAINTING THE WHITE HOUSE GREEN: Rationalizing Environmental Policy Inside the Executive Office of the President

Edited by Randall Lutter and Jason F. Shogren
205 pages; Washington, D.C.: Resources for the
Future, 2004

CAN BETTER ECONOMIC analysis make for better environmental policy? The answer should be yes, but Randall Lutter and Jason Shogren's book *Painting the White House Green* gives little reason for optimism. Nonetheless, their book provides a valuable inside look at the treatment of environmental issues by the Council of Economic Advisors (CEA).

The book's chapters, each written by a former CEA senior economist, explore environmental issues on which the council advised the last three presidents. Unlike the economic analysis conducted by regulatory agencies in support of their own agendas, the CEA's analysis should be more objective (though the council's chairman and members are appointed by the president and likely to reflect the White House's overall outlook). The CEA is like the Office of Management and Budget in providing an independent Executive Branch opinion on regulatory and other policy matters, though only the latter has a formal role in the rule-making process. Nonetheless, the council could serve as a valuable reality check on bad environmental policy as well as a source of innovative alternative approach-

es. But this book shows how and why the CEA has fallen short of that potential.

CLIMATE CHANGE Nearly half the book deals with the issue of climate change—and for good reason, as the economic stakes are so high. The costs of any serious effort to stabilize atmospheric concentrations of carbon dioxide, the chief anthropogenic greenhouse gas and ubiquitous byproduct of fossil fuel use, would easily dwarf those of every other environmental measure to date. But the CEA seems to have fallen into the trap of accepting the premise that “something must be done.” Thus, it has limited its role to finding more efficient schemes for regulating carbon emissions, either through the Kyoto Protocol or domestic proposals.

All the authors agree on the virtues of a cap-and-trade program for greenhouse gases, modeled after the highly touted (but not so highly scrutinized) market-based program for reducing acid rain-forming emissions under the 1990 amendments to the Clean Air Act. Council economists have given considerable thought to finding the best way to set up and operate such a market-based program for carbon emissions. The CEA also tackles other global warming policy challenges, including the participation level of the developing world. It has suggested several schemes to get the Third World on board, mostly involving transfers of wealth and technology from rich countries to poor ones.

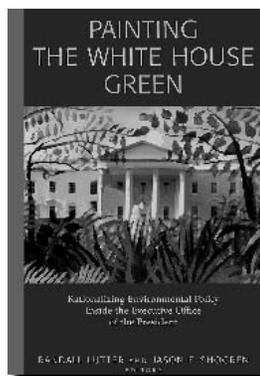
But in detailing how we should create a

carbon-constrained economy, none of the book's authors satisfactorily explains why we should do so. Granted, global warming poses risks, but so does global warming policy. The latter, even with the bells and whistles of sophisticated market mechanisms, may well exceed the former. That is particularly true now that scientific evidence is building against the more catastrophic warming scenarios. Further, the book gives no serious consideration to the argument for resilience—the notion that a nation with a strong economy can better deal with future problems than one weakened by decades of costly but invariably misguided preventive measures—even though it is precisely the kind of outside-the-box thinking to which the CEA could be contributing. Whether through administration pressure or sympathy for the goals of carbon rationing, no one at the CEA was willing to challenge the need for a grandiose greenhouse agenda.

NAAQS Only one chapter, written by Randall Lutter, chronicles a CEA effort to take an environmental initiative head-on. The Environmental Protection Agency's 1997 National Ambient Air Quality Standard for ozone was the target of sharply critical analysis by both the CEA and the OMB. The council did not merely engage in technocratic tinkering to make implementation a little cheaper or suggest some newfangled market mechanism, but actually provided analysis that all but opposed the rule.

Even the EPA's own analysis concluded that the benefits of tightening the already-stringent existing ozone standard were modest and would be exceeded by costs. Nonetheless, the agency was perfectly willing to move ahead with its proposed rule. The CEA stepped in and complained that the EPA's cost figures were gross understatements, and even questioned the agency's treatment of the science. Lutter believes the “EPA's ozone standard set a low in the use of bad analysis to support bad environmental policy.”

The weak economic case for the ozone rule prompted then-EPA administrator Carol Browner to resort to emo-



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tional appeals, such as the plight of asthmatic children struggling to breathe smoggy air. In a political debate, economics is a poor weapon against such highly charged rhetoric, and the pro-regulatory forces within the Clinton administration won the day. Subsequent legal challenges to the ozone rule also failed, in part because the relevant Clean Air Act provisions preclude the agency from taking costs into account. Thus, even when the CEA made a justified attempt to be the economist skunk at the environmentalists' garden party, the political and legal

forces favoring regulation prevailed.

Outside of this example, there is little evidence that the CEA provides the kind of independent economic analysis that could act as a brake on at least some federal environmental policy ambitions. Washington has no shortage of overzealous regulators and politicians attempting to expand the reach of the federal government on environmental grounds. The council could play a role in checking those regulators and politicians, but as *Painting the White House Green* demonstrates, it has often preferred to join them. **R**

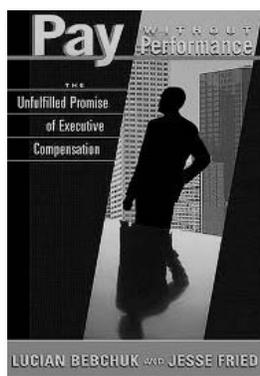
Misdiagnosing Manager Power

Reviewed by William A. Niskanen

PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION

By Lucian Bebchuk and Jesse Fried

Cambridge, Mass.: Harvard University Press, 2004



LUCIAN BEBCHUCK AND Jesse Fried's book *Pay without Performance* is based on a simple premise:

Managers use their power to secure rents. . . . Because managers and directors might have to bear market penalties and social costs if they adopt pay arrangements that are perceived as egregious, "outrage" costs and constraints place some limits on deviations from arms-length contracting. To avoid outrage, compensation designers attempt to hide, obscure, and justify . . . the amount and form of executive pay.

In other words, corporate managers, with the approval of compliant boards, effectively choose the amount and form of their own compensation, subject only to the limit that the compensation not provoke "outrage." As this book may

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become the standard reference for the law professors, sociologists, and journalists who share this managerial power perspective, it is important to evaluate the authors' reasoning and the empirical conditions that they claim as evidence for this perspective.

Bebchuk and Fried weave together a story with elements that are neither implausible nor new: CEOs who seek to increase their personal wealth even at the expense of the shareholders; directors who support the CEO out of loyalty, collegiality, and a desire for reappointment and who have neither the time, information, nor financial incentive to challenge him; and shareholders who have a very limited power to intervene. (The only internal error in this story is that the financial incentives of a director are a function of the total value of the shares that he owns, not his fraction of the total shares.)

The implications of this perspective for the level and form of executive compensation, however, cannot be directly tested, because there are no objective measures of the degree of board compliance and the limits on compensation

that would not provoke outrage. But the authors claim that other types of evidence support their managerial power perspective. First, they make a prior personal judgment about the types of executive compensation that they believe are performance enhancing and those that are not. Second, they find that their favorite type of compensation is rare and that other types of compensation that they have judged to be ineffective are rather common.

But Bebchuk and Fried are wrong in their judgments about the types of compensation that are more or less performance enhancing. They assert, for example, that an option indexed to some broader industry or general stock index is much superior to an unindexed option because it does not reward or punish the executive for conditions common to the industry or the general stock market. But they apparently do not recognize that an executive would have to be offered many more indexed options or a higher salary to compensate him for the much lower expected return of an indexed option.

In contrast, Bebchuk and Fried judge that executive loans are not performance enhancing. A study by Lawrence Cunningham of the Boston College Law School, however, concludes,

Loans are often tailored bonus schemes, forgiven or modified if executives achieve certain results. In that sense they resemble the incentive features of stock options, except that they are better. One reason loans are better than stock options is they have a downside if targets aren't met (the borrower must pay), whereas options expiring worthless pose no penalty.

In its infinite wisdom, of course, Congress has banned company loans to executives in the recent Sarbanes-Oxley Act.

Other types of evidence are also strongly inconsistent with the managerial power perspective on executive compensation. In contrast to Bebchuk and Fried's assertion that CEO compensation is only weakly related to firm performance, a 2000 paper by Brian Hall and

Jeffery Liebman reported their estimate that a 10 percent increase in a firm's market value, which would add billions to the value of shareholders' wealth, would add \$1.25 million to the value of a median CEO's accumulated stocks and options. In contrast to Bebchuk and Fried's assertion that corporations "camouflage" the amount and form of executive pay, a 2001 paper by Venky Nagar, Dhannanjay Nanda, and Peter Wysocki found that the level of disclosure "is positively related to the proportion of CEO compensation based on stock price." In a 2002 paper, Kevin Murphy reports that the average first-year compensation of CEOs hired from outside the firm (and thus who have little power over the existing board) is nearly twice that of CEOs promoted from within. In another 2002 paper, Michelle Hanlon, Shivaram Rajgopal, and Terry Shivlin report that "the future operating income associated with a dollar of Black-Scholes value of an ESO (executive stock option) grant is \$3.82" and conclude that there is "little evidence in support of rent extraction" by top managers.

A 1994 summary of studies of executive compensation for the National Bureau of Economic Research by Nancy Rose concluded, "We find no evidence for the popular view that boards typically fail to penalize CEOs for poor financial performance or reward them disproportionately well for good performance." A similar 2003 survey for the Federal Reserve Bank of New York by John Core, Wayne Guay, and David Larcker concluded that, "in contrast to the allegation of many media pundits . . . who assert that incentive levels are random, arbitrary, or out of equilibrium, empirical evidence suggests that, on average, firms base their equity incentives on systematic and theoretically sensible factors."

Other evidence that Bebchuk and Fried offer in support of their managerial power perspective is that less than one percent of all CEOs resigned or were forced out each year because of poor performance in the years from 1993 through 1999; the authors do not mention that the stock market increased nearly 20 per-

cent a year during that period. This situation, however, changed dramatically after the stock market peaked in early 2000. By 2002, Margarethe Miersema would observe, "The firings of CEOs when performance nosedives has become commonplace in U.S. business."

Executive compensation differs substantially among firms and has changed dramatically over time. Bebchuk and Fried provide no explanation of those differences or changes. They tell a plausible story that corporate executives have some managerial power, but they make no case that the differences in executive compensation are explained by the unmeasured differences in board compliance and the limits on compensation that would not provoke outrage, either among firms or over time. In summary, there is no reliable body of evidence that is consistent with substantial managerial power over their own compensation, and the managerial power perspective provides no explanation of the substantial differences in executive compensation among firms or over time. **R**

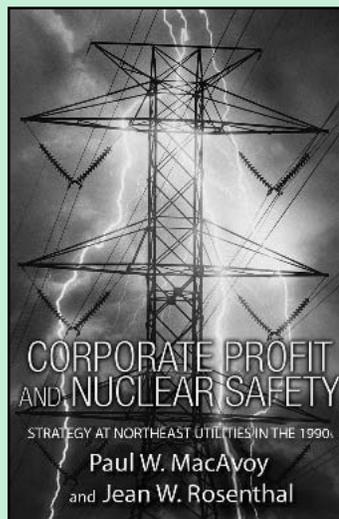
CORPORATE PROFIT AND NUCLEAR SAFETY

Strategy at Northeast Utilities in the 1990s

Paul W. MacAvoy and Jean W. Rosenthal

**"A sobering tale,
told fairly and
skillfully."**

—Paul Portney,
President,
Resources for the Future



In 1996 the Nuclear Regulatory Commission, concerned with safety issues, shut down the nuclear power plants operated by Northeast Utilities Company. As plants were struggling to avoid closure, the company's corporate earnings, stock prices, and executive paychecks were growing. Here Paul MacAvoy and Jean Rosenthal examine exactly what happened in the ten years that preceded shutdown, paying particular attention to executive compensation and the part played by the company's board of directors.

"MacAvoy and Rosenthal paint a vivid picture of a board of directors ignoring not just red flags, but explicit warnings of the impending calamity, while being calmed by a complacent management. Their book serves as a warning."

—Ira M. Millstein, Chairman of the Private Sector Advisory Group of the World Bank/OECD Global Corporate Governance Forum

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