In Review

Miller's Prescription

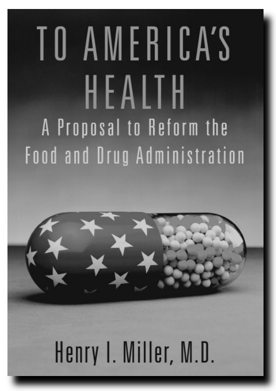
Reviewed by Sam Peltzman

TO AMERICA'S HEALTH: A Proposal to Reform the Food and Drug Administration
By Henry I. Miller, M.D.
136 pp. Stanford, Calif.: Hoover Institution Press, 2000

THE DEVELOPMENT OF THE modern pharmaceutical industry ranks among mankind's greatest achievements. It has produced drugs that have wiped out age-old scourges and improved the quality and length of life for millions of people. But the potency of modern medicines also entails risks. Some new drugs do not work as expected; either they work not at all, or, worse, they harm or kill.

Most of us understand that such risk is a necessary price of progress. The only sure way of eliminating it is to eliminate innovation. So the relevant question for public policy is how to balance the prospective benefits and risks of pharmaceutical innovation. In the United States, the striking of this balance is entrusted to the federal Food and Drug Administration (FDA). No new drug may legally be sold in the United States without first securing this agency's approval.

In his new book, *To America's Health: A Proposal to Reform the Food and Drug Administration,* Dr. Henry I. Miller argues that the FDA errs excessively on the side of caution when it considers approving new drugs. According to Miller, the FDA's drug approval process takes too long and costs too much. (From start to finish, the FDA-regulated testing process necessitates half-a-billion dollars in spending and more than a decade of examination before a new drug is approved for sale.) Excessive caution has deadly risks; it delays potentially lifesaving benefits and discourages some potentially beneficial drugs from being developed at all. Miller, a medical doctor who formerly worked for the FDA, believes that the current regulatory system kills more people than it saves.



If Miller is right — and I think he is — then this regulatory delay is no less than a major scandal. Imagine the cries of outrage from Congress and the media if any other activity, public or private, were shown to be killing thousands of innocent victims. But we hear hardly a peep about the FDA; the agency has a sterling reputation as the indispensable guardian of the nation's health.

THE DIAGNOSIS

MILLER'S SLIM BOOK TRIES TO OFFER a way out of this continuing national tragedy. But like the good doctor he is, Miller first diagnoses the disease before recommending a cure. The FDA does not do what it does out of malice or incompetence, Miller tells us. It is simply responding to the political incentives it faces.

The FDA's main victims are anonymous — potential beneficiaries of drugs delayed or never developed because of the agency's costly and lengthy approval process. Such victims often do not themselves know they are victims. By contrast, it is easy for the media to identify and sensationalize situations in which a new drug proves harmful. For the FDA, it is better to be extra safe than to be sorry when the commissioner must appear before a congressional committee to be pilloried for lax enforcement.

What of the pharmaceutical industry? Will they not bring countervailing pressure to speed things up? Not really, according to Miller. One drug company may wish to speed its next blockbuster drug to market. But, once having succeeded, the company will want to slow the progress of potential rivals.

What is more, well-established pharmaceutical companies benefit from their experience with the current, difficult system. When a biotech startup discovers a promising new drug, it rarely tries to sail the unknown seas of the FDA approval process on its own. Instead it partners with an established drug firm, in effect buying that firm's accumulated navigation skills. Indeed, those skills may well be the larger firms' most valuable asset. The giant pharmaceutical companies will not be anxious to advocate reforms that jeopardize the value of that asset.

A PROPOSED CURE

SURPRISINGLY, MILLER DOES NOT embrace deregulation as his preferred alternative to the present system. He fears that deregulation will tempt drug companies to take premature shortcuts in bringing a product to market, or — conversely — that the lack of a formal approval process will paralyze litigation-fearing firms. Besides, Miller

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decides, deregulation is too radical a step to be taken seriously.

Instead, he wants to allow nongovernmental entities to certify the safety and efficacy of new drugs. The FDA, in turn, would approve these private certifiers and would have veto power over the certifiers' decisions. Any number of certifiers could, in principle, enter the certification business to compete for the user fees that would fund their operation. Thus, a reputation for excessive delay (or excessive speed) would become a commercial liability.

Miller's proposal may sound radical, but it is not. The FDA already contracts out some of its information gathering, it is already partly financed by user fees, and private certifiers of safe products already exist both inside the drug industry (in other countries) and outside it (Underwriters Laboratory).

His recommendation deserves serious consideration because the arguments underlying it are sound. Public purposes require neither public provision nor public monopoly. Those of us recently subjected to the tender mercies of the government monopoly over air traffic control know what Miller is saying.

NOT TREATING THE DISEASE

NEVERTHELESS, I HAVE TO SAY THAT I liked Miller's diagnosis better than his cure. My main reservation about his proposal is that it solves a problem different from the one that has produced the tragic absurdities so well documented in his book. If the problem were mainly, or even substantially, an unresponsive, sluggish bureaucracy, then Miller's proposal would promise considerable improvement. But that is not the important problem; to the contrary, the FDA has been very responsive to the political incentives it faces. Those are the incentives that count for a government agency.

None of those incentives would change if the federal government were to adopt Miller's proposal. The asymmetry in the agency's gain from new drug benefits versus the political costs from new drug harms would remain. The industry's interest in limiting competition and preserving its status as the bridge over dangerous regulatory waters would remain. What kind of regulated-by-the-FDA private certifier would survive in a world with such incentives? It will not be the one that risks the FDA's wrath by substantially speeding things up.

Is there no hope for any significant change in policy? Some recent developments actually give grounds for cautious optimism. One is the FDA's handling of AIDS drugs. The anonymous victims of that disease did organize to bring political pressure on the agency for faster approval of drugs, and the agency did change its policies. The clear message from this episode is that the FDA will bend to politically potent consumer groups seeking faster approval for new drugs. This message will not go unnoticed. But it can only have sporadic effects.

More systemic pressure on the FDA is arising from changes in the drug market and consequent changes in the interests of drug producers. The growth of third-party payment for prescription drugs and of generic competition has reduced the effective time over which a pharmaceutical company can make substantial profits on new drugs. As soon as a branded or generic alternative appears, a savvy HMO or other third party will brandish the threat of dropping the pioneer drug from a restrictive formulary, thereby extracting a steep price concession from the manufacturer. This development has tilted the industry interest toward desiring earlier approval of new products, so that there are longer windows of opportunity until generic competition emerges.

The FDA has not been dozing in response. The annual rate of new drug introduction was about 50 percent higher in the 1990s than in the preceding decade. Even the rhetoric has changed. When economists and pharmacologists began, over 20 years ago, to point out the hidden costs of the FDA's lengthy and costly approval procedure, the agency initially reacted with outraged denial. But, in time, it came to recognize that there was a problem. The FDA then made some cosmetic procedural reforms before finally, after the political winds changed, adopting less restrictive policies.

That change in policy is a change for the better. Indeed, I suspect the forces of globalization and information technology may further loosen the FDA's grip. At some point, a court will likely rule that the agency's obsessive refusal to accept foreign drug testing and marketing approval is an illegal barrier to trade. And, if that ruling does not happen, savvy doctors (or patients) may simply make an end run around the FDA with a few mouse clicks to a foreign pharmacy's Web site. None of this will seriously threaten the agency's power soon, but the longer-run threat may be considerable.

Miller has written a valuable book; anyone under the misapprehension that the FDA has been an enabler of medical progress would do well to read it. His proposed reform is clearly a step in the right direction. But I fear we will have to depend on more powerful medicine for meaningful reform. R

Worrying About the World Economy

Reviewed by Thomas Oatley

THE CHALLENGE OF GLOBAL CAPITALISM: The World Economy in the 21st Century
By Robert Gilpin
373 pp. Princeton, N.J.: Princeton University Press, 2000.

THE HEAVILY INTEGRATED global economy that we see today, at the dawn of the twenty-first century, harkens back to the emergence of the first integrated world economy of the late nineteenth- and early twentieth centuries. In that era just prior to the First World War, international trade played an important role in most developed countries' economies. Imports and exports

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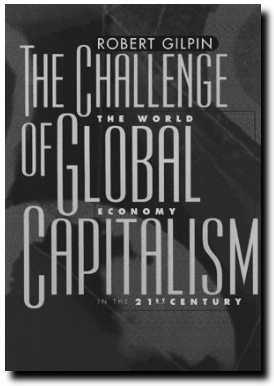
amounted to as much as 50 percent of many European countries' gross national product (GNP) while capital flows equaled between three- and five percent of a "typical" country's GNP. As remarkable as those figures are, international trade is more important today, as a percentage of GNP, than it was a century ago and contemporary international capital flows are approaching pre-World War I levels.



Despite the robust activity of contemporary international trade, political scientist Robert Gilpin believes the current global economy is imperiled by the dissolution of the cold war economic policies of the West that created it. In his new book *The Challenge of Global Capitalism: The World Economy in the 21st Century*, Gilpin argues that nations must re-establish cooperative economic policies in order to preserve the global economy.

GLOBAL ECONOMICS AFTER THE COLD WAR

ACCORDING TO GILPIN, COLD WAR economic cooperation among the western nations was not primarily oriented toward material well-being. Instead, he writes, "the fundamental purpose of the world economy was to strengthen the economies of the anti-Soviet alliance and solidify the political unity of the United States with its allies" (p. 48). This purpose meant that western nations were not always determined to follow free market policies; "Although the global economy, or at least those economies outside the Soviet bloc, was based on economic principles such as free trade and (after the mid-1970s) freedom of capital movements, these principles were set aside whenever necessary to serve the political purpose of increasing the strength of Allied economies and the cohesion of the anti-Soviet alliance" (p. 48).

In Gilpin's mind, it follows quite logically that these cold war political foundations must crumble now that the cold war has ended. With no Soviet threat forcing western governments to subordinate their economic differences to the overarching goal of alliance cohesion, economic cooperation in support of the global economy is no longer assured. In Gilpin's own words, "conflicting national ambitions and national interests increasingly threaten to undermine the cooperation on which the world economy has been grounded" (p. 53). Because economic cooperation is threatened, the stability of the international economy is at risk: "the Post World War II economy no longer exists, [and] no agreement has yet been achieved regarding a new world economic order or its rules and guiding principles" (p. 50), Gilpin writes.

He develops this argument through an extensive survey of the contemporary global economy. Gilpin examines the international trade system in its multilateral and regional guises, the role played by multinational corporations, the instability of the system of floating exchange rates, and the series of financial crises that have struck developed and developing countries during the 1990s.

At the risk of overstatement, Gilpin compiles evidence to support his claim that the global economy stands at the brink of crisis. His chapter titles indicate the sense of impending doom: "The Insecure Trading System," "The Unstable Monetary System," "Global Financial Vulnerability."

A NEED FOR REFORM?

GILPIN CONCLUDES THE VOLUME BY proposing solutions to the weaknesses he identifies. These proposals are not particularly compelling, however, because the book fails to convince an informed reader that the global economy is truly imperiled.

What should we make of Gilpin's claim that the postwar economic system no longer exists? The postwar economic system was based on two central elements. First, at the end of the Second World War, American policymakers attempted to create a nondiscriminatory, multilateral, and liberal international trade system and an international financial system that combined convertible currencies, international capital mobility, exchange rate stability, and domestic macroeconomic policy autonomy. Second, to achieve these goals, American policymakers worked in tandem with the British to create international institutions — the stillborn International Trade Organization, the General Agreement on Tariffs and Trade, the International Monetary Fund, and the World Bank — to provide a governance framework within which to manage global economic relations.

Were they alive today, American wartime planners would see little in the international economic system that they did not design, and they likely would be quite pleased with what has been achieved within this system. Tariff protection on manufactured goods is no longer an important barrier to trade in the advanced industrialized world. All of the world's most important currencies are convertible on demand, and international financial flows are increasing at an exponential rate. The contemporary international economic system, in other words, is precisely what American policymakers sought to create at the end of the Second World War.

Cold war cooperation? Gilpin is mistaken to suggest that the political foundation at the base of the global economic system is weaker today than it was at the height of the cold war. On the one hand, he seems to gloss over the conflict that characterized economic interaction among the advanced industrialized countries during the cold war. The author's discussion of the postwar international monetary system is illustrative.

Gilpin suggests that the basic principles negotiated at the Bretton Woods conference in 1944 were "extraordinarily successful" in governing the international monetary system for "three decades" (pp. 59-60). In fact, although the Bretton Woods system was created in 1944, its central component — the convertibility of national currencies for current account transactions — was not implemented by any European government until 1958 (save for a very brief attempt by the British in 1947). Once implemented, the system quickly began to experience difficulties, and currency and gold crises occurred on a regular basis after 1960. By 1967, western governments were discussing fundamental systemic reform and, by 1971, the system had collapsed as the United States ended the dollar's convertibility into gold. The Bretton Woods system, therefore, was hardly an "extraordinary success."

Cold war pressures failed to induce western governments to subordinate their national ambitions to the interests of alliance solidarity in order to save the Bretton Woods system. As the dollar weakened against gold in the late 1960s, French President Charles De Gaulle instructed the Banque de France to sell the dollars it held in an attempt to eliminate the "exorbitant privilege" he claimed the United States gained from the dollar's role as its key currency. While the West German government was more cooperative, this was in no small part a response to an American threat to reduce its defense commitment unless the Bonn government held more dollars than it desired.

Finally, the Bretton Woods system's final act is a case study in power politics, as the Nixon administration unilaterally suspended gold convertibility and imposed import surcharges in order to force Western European governments to revalue their currencies against the dollar. In short, the Bretton Woods system provides little evidence of governments subordinating their national interests to the objective of alliance solidarity.

A weakening of cooperative principles? On the other hand, Gilpin seems not to appreciate the fact that the international rules and guiding principles created under U.S. leadership in 1945 are more firmly accepted today than they were even 25 years ago.

In 1975, few governments of developing countries found merit in the rules governing the international economy. The Group of 77 was pressuring the advanced industrialized countries for far-reaching international economic reform under the banner of the New International Economic Order (NIEO). One hardly need mention the fact that Soviet-bloc governments were no fans of the postwar global capitalist system. Today, the governments of most developing countries and former members of the Soviet bloc have abandoned structuralist and Marxist critiques of the international capitalist system and have embraced trade liberalization and domestic market reform as the path to economic development.

In short, the rules and guiding principles for the international economy established at the close of the Second World War are supported by a larger number of governments today than at any point during the cold war. This is hardly a sign of a crumbling political foundation.

THE EVOLVING WORLD ECONOMY

RATHER THAN A SHARP DISJUNCTURE between the cold war international economy and the post-cold war international economy, one might as easily (and perhaps more accurately) highlight an essential continuity in the postwar international economy. The international institutional framework constructed at the end of World War II promoted intergovernmental economic interaction that has, in turn, created a highly integrated global economy. Because international economic integration generates winners and losers (at least in the short run), it is hardly surprising that a mixture of cooperation and conflict would characterize international economic relations throughout the period. And while Gilpin asks us to believe otherwise, the amount of conflict in this system today is no greater than, and the amount of cooperation in this system is no less than, we saw at the height of the cold war.

Of course, Gilpin is right to suggest that global capitalism in an age of democratic governance poses challenges that the advanced industrialized governments have never before confronted. It is a bit early, however, to suggest that the sky is falling. R

Appraising Predation

Reviewed by Richard L. Gordon

ARE PREDATORY COMMITMENTS CREDIBLE? WHO SHOULD THE COURTS BELIEVE?
By John R. Lott, Jr.
173 pp. Chicago, Ill.: University of Chicago Press.

BAD ECONOMIC CONCEPTS can defy refutation for decades or even centuries. This is particularly true of concepts that government uses to justify intervention in the marketplace. One such concept is the notion of predation — that firms commonly sell at below cost or otherwise sacrifice profits to drive off competitors. The alleged payoff is that, once the rivals are gone, the surviving firm can sharply raise its prices to secure substantial profits.

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The academic literature includes numerous discussions of the theory and practice of predation, and its detection. In these articles, authors debate whether predation is a common strategy, whether it would successfully kill off rivals and not revive them with subsequent price increases, whether a predator firm can afford such a strategy, and whether any actual examples of predation can be identified with certainty.

John Lott is a veteran observer of these battles. In his new book, *Are Predatory Commitments Credible?* Lott examines selected aspects of the debate. The book tersely but effectively examines the logic of traditional and new theories, offers extensions, and tests the applicability of different theories of predation and its detection.

Lott's particular concern is the proliferation of academic work in the 1980s purporting to undermine devastating earlier critiques of the theory of predation. As prior observers noted, the '80s work was untested theory. Lott puts that theory to the test.

The book opens with a condensed survey of the debate. This discussion treats the essence of the older and the newer theories and examines the minimal empirical support for these views. The author also discusses recent antitrust actions that centered on claims of predation, including the high-profile case involving the price cuts by cigarette maker Brown and Williamson and the ongoing Microsoft case.

In the book's second chapter, Lott develops and tests a plausible model of what is needed to ensure predatory activity. He relies on a simple, ingenious proposition that, for predation to be a sensible strategy, the predator firm must reward, and not punish, managers for temporary losses. Lott employs numerous statistical models to determine whether firms involved in predation provide the managerial incentives needed. He finds that the data do not support the premise that predators protect and reward managers for predation. This supports his doubts about the relevance of predation and shows how difficult it is to test for it.

In Chapters Three and Four, Lott offers an argument that government-owned firms are more likely to employ predatory pricing. As he is aware, many problems arise in testing this proposition. Lott notes that governments are unlikely to attack their own agencies and may exempt them from regulatory review. Thus, domestic predation cases against government agencies do not occur. He might have added that these agencies often have no domestic competition.

However, actions against alleged predation are more likely in international trade. Thus, in Chapter Four, Lott tests whether government-owned companies in nonmarket economies are more often accused of "dumping" (selling below cost) than private firms. He properly recognizes that dubious methods are regularly employed to evaluate dumping charges. (Antitrust watchdogs try, often unsuccessfully, to apply economic principles properly; dumping watchdogs often deliberately ignore economics.) He proceeds to develop various variants of a statistical model of the initiation and confirmation of dumping charges. In most variants, the nonmarket effect is positive and significant. Lott then runs tests of whether some obvious defects, such as a tendency of nonmarket countries to export in industries prone to dumping charges, produce the results. Such problems are not found. From this analysis, Lott initially concludes that he has vindicated the hypothesis that nonmarket economies predate, but he eventually retreats to the more tenable position that importing countries act as if nonmarket economies are a greater threat.

Chapter Five presents an extension of predation theory that emphasizes options for the "victims." Victims in a potentially predatory situation possess better information on their own situation than the presumed predator. Such knowledge allows the managers to profit from speculating in the stocks of the predator. Lott considers examples of, first, a neglected opportunity to speculate and then several realized opportunities. He also examines the absence of legal prohibitions of the practice and he presents a short, fairly simple development of the underlying theory.

This book is essential reading for economists, attorneys, and government officials. Casual readers can also benefit.

This book is essential reading for economists, attorneys, and government officials who have a serious interest in predation. Those with more casual interests can also benefit. Almost all of the treatment is accessible. Very little theory is developed, and the expositions are at an introductory economics level. The statistical models are generally well presented and reasonably explained (though the first several models do not provide the traditional starring of significant coefficients). Intelligent readers should absorb the essence of Lott's arguments.

This book clearly was not intended to be the definitive treatment of the subject; the author's goal seems more to shake up thinking at a time when public policy is strongly concerned with predation. In particular, his remarks about Microsoft suggest a desire to influence that case (which, in fact, was impervious to economic analysis). This is a reasonable objective, and it leaves others the opportunity to carry out more work on predation.

The book has already received a lengthy review by David E. M. Sappington and J. Gregory Sidak in the *University of Chicago Law Review*. They consider the book a must read. However, their appraisal of the content seems backward; they believe that the case for government predation is better than the refutation of private predation. However, the main concern with the latter is applicable to all statistical analyses — every possibility was not considered. Lott's implicit rationale is that, before abandoning skepticism about the importance of predation, strong evidence should be available. The failure of proof to emerge from either court cases or examination of readily available data makes clear that advocates of increased concern must provide better empirical evidence. As argued above, a good test of whether government predation occurs seems exceedingly difficult to design. Sappington and Sidak make this point strongly. What impresses them is that Lott has raised a new issue.

An important concern of Sappington and Sidak that seems overblown is Lott's omission of elaborate formal models. Again, Lott seems to aim for readability and rapid completion instead of completeness. This was an appropriate choice. The models are good enough to make Lott's points. In the future, someone eager to build a reputation will surely meet the desire for more elaborate ones. R

Need for Reseeding

Reviewed by Richard L. Gordon

A BURNING ISSUE: A CASE FOR ABOLISHING THE U.S. FOREST SERVICE
By Robert H. Nelson
Lanham, Md.: Rowman & Littlefield

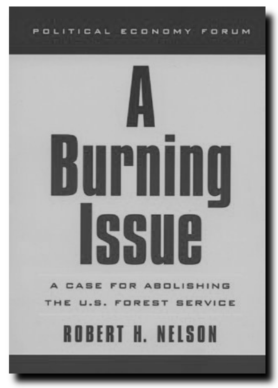
A VISION FOR THE U.S. FOREST SERVICE: GOALS FOR THE NEXT CENTURY
Edited by Roger A. Sedjo
Washington, D.C.: Resources for the Future

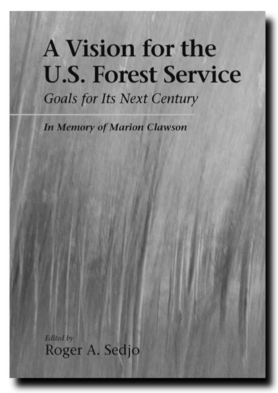
IN THE WAKE OF LAST SUMmer's disastrous fire season and the revelations that federal land management policies may have contributed to their severity, policy experts are increasingly scrutinizing the activities and mission of the U.S. Forest Service. (See "The Forest Service's Tinderbox," in *Regulation*, Vol. 23, No. 4.) At one time, this agency was respected for its commitment to its original mission of providing timber for American consumers, and its avoidance of bureaucratic malaise. Now, as its mission has expanded to include (and indeed shifted to) the promotion of endangered species and "wilderness values," some policy experts are calling for radical reform of the agency. A few experts even say it is time for the Forest Service to be abolished altogether. These viewpoints are presented in two recent books, *A Burning Issue* by Robert H. Nelson, and *A Vision for the Forest Service*, edited by Roger A. Sedjo.

NELSON'S ABOLITIONISM

FOR MORE THAN A QUARTER-CENtury, Nelson has studied and commented on public land management. As the subtitle of his latest work makes clear, he has come to view the Forest Service as so defective that elimination is desirable. The book's main title offers one of the main reasons why Nelson believes this: the agency's policy of fire suppression has produced disastrous effects. Fires have historically been a mechanism for preserving the quality of forests, but suppression measures have removed these benefits. As a result, public lands are now burdened with less desirable species of plant life and an accumulation of underbrush. These excess fuels pose a severe fire danger, as the fires of 2000 demonstrated.

Nelson's stress in this book, as in past writings, is on the failure of "scientific management." Under scientific management, large staffs of experts were supposed to manage public lands efficiently in an atmosphere isolated from political pressures. Actually, the system's reliance on (monopoly) elite management made it no more efficient than any other centrally planned system. Moreover, Forest Service managers were far from shielded from political pressures.





Nelson stresses the inherent defects of centralized management. Surprisingly, he does not note the Forest Service's basic problem: its original mission of providing timber for homebuilding was invalid because it assumed that government is better than private entrepreneurs at anticipating future timber needs. Comparative experience with capital markets and government programs makes this assumption seem absurd. The assertion that lumber could best be provided by scientific management was, thus, bad theory that produced bad practice.

The book follows introductory material with a two-phased development of the arguments. Chapters One through Four examine how inappropriate fire prevention policies and other errors made the Forest Service terminally flawed. The remaining chapters discuss options for decentralizing land management.

Nelson's discussion of the need for improvement starts in Chapter Five, with an examination of reasons why the United States should decentralize land management. He notes the ideology-oriented viewpoint at the national level of government and interest groups, as compared to the more specific, practical focus of local groups. His appraisal of the importance of this difference is correct but confusing; he keeps shifting between the virtues and critics of decentralization.

In Chapter Six, Nelson turns to analyzing the overall role of the Forest Service. He begins with a sketch of total federal land management in the West. As in his earlier work and in the prior chapter, he notes that much of the public support in the West for federal management arises from the associated federal expenditures. Turning to the Forest Service, he finds it hampered by efforts of state governments, the Forest Service staff, and recreationists who benefit from the income that the forests can generate.

Nelson then divides federal lands into areas of commercial value where privatization is preferable, areas that are of local significance that would best be managed by local government, and "most national parks or some wilderness areas" that involve federal issues and should remain federal. Unfortunately, the author does not clearly specify the criteria he used when carrying out this classification.

I disagree with Nelson's suggestion that some lands are best left in the hands of the federal government. My recent examination of the composition of the park system suggests that since national parks are predominantly recreational areas that have been indiscriminately created and inadequately preserved, the preference for federal ownership is wrong. I also question whether any lands need state ownership.

Nelson's final chapter outlines his preferred solution for federal land management problems. He advocates an initial, gradual transfer of management responsibility from the federal government to local groups and to state and local governments. Ultimately, his reallocation among sectors would occur with other federal agencies taking over whatever Forest Service lands were retained. It is unclear how he can reconcile this course of action with his earlier writings on the subject, which recognize that these other agencies also exemplify failed scientific management.

In short, Nelson provides a devastating case against both the Forest Service and against policymakers' glib proposals for how to improve the agency's record. His own ideology and conclusions may be problematic, but the book is still a valuable guide to the defects of public land management.

SEDJO'S ASSORTMENT OF VIEWS

NELSON IS ALSO A CONTRIBUTOR to *A Vision for the Forest Service*, which is a compilation of papers presented at a 1999 symposium sponsored by Resources for the Future. Edited by Roger Sedjo, the book contains substantial essays by Nelson, Jack Ward Thomas, Sally K. Fairfax, and Lawrence Ruth.

Nelson provides a devastating case against both the Forest Service and against policymakers' glib proposals.

Thomas, a former chief of the Forest Service, discusses numerous agency problems and their perceived cause. These problems range from the agency's change of mission from timber production to "wilderness values," to many aspects of the form and substance of policy implementation. Thus, Thomas devotes several sections to the ways in which the Forest Service is subject to strong political pressures. He examines the agency's policies for allowing and maintaining roads, the problems of determining the profitability of timber sales, and the collection of fees for recreational access. The result is an interesting survey of specific problems of the Forest Service. The main drawback of the paper is Thomas's uncritical belief that the agency is a desirable agency that simply needs greater independence.

Nelson reprises his long-held argument that the Forest Service was based upon a defective vision that scientific management would produce a preferable outcome for the nation's natural resources. As with *A Burning Issue*, he concludes that a more decentralized structure is needed, but he only tersely outlines the different ways that this restructuring could be accomplished.

Fairfax, of the University of California, Berkeley, offers an overview of her prior academic work indicating that public lands administered by state trusts are managed more efficiently than federally managed lands. The reason for the success of the state trust policy is that such trusts must follow the prudent management practices required of all trusts. Fairfax concludes by recommending that the Forest Service, itself, adopt a trust-like approach.

Ruth's chapter examines the changing of the Forest Service's mission. This emphasis leads to consideration of how concern for the spotted owl brought on an ecological emphasis.

The volume's remaining papers function as supplements to the four just noted. Three of the papers devote most of their space to the agency's history and the policy implications of this history. Sedjo's treatment concludes by noting the loss of support from business organizations for Forest Service, and the difficulties of restoring that support. Among his critical points is that a shift to nonmarket commodities reinforces the loss of supporters and, thus, support. He tentatively suggests a merger with the Bureau of Land Management.

Unfortunately, the book is best described by the all-too-obvious observation that you cannot see the forest for the trees. The editing seems too light. It might have been infeasible to force the contributors to lessen repetition and give deeper discussions. However, Sedjo could have taken the standard editor's prerogative of contributing a critical review of the other pieces. Instead, he was just another repetitive, incomplete author.

What is more, the book shows too little awareness of basic economic principles. The nods to market forces and privatization are fleeting. This is a serious departure from Resources for the Future's tradition of using economics to elucidate policy questions.

The skepticism, particularly by Nelson, of the Forest Service's rationale coexists with the numerous proposals to restore the old esprit. Different authors mention such alternatives as insulating the agency in a federal corporation or privatizing public land management. None of these views are fully presented. For example, several contributors recognize that when timber is the predominant land-management value, privatization is the clearly preferred option. However, the authors' tendency is to assert that only a small part of the Forest Service's land falls into this category.

This is unsatisfactory. The criterion presented is too narrow and the conclusions about its applicability are unsupported. Privatization is preferable when marketable goods of all kinds are the dominant outputs. Moreover, continued provision of marketable commodities requires maintenance of the underlying ecosystem. It is unclear whether governmental controls are needed to preserve the ecosystem and whether government ownership is superior to regulation or inaction in producing optimal preservation.

In short, the book provides useful material on the problems of the national forests, but it fails to synthesize the debate for the reader. Fortunately, Nelson undertook an extensive survey of the issue in his book, and this discussion goes a long way towards providing the needed synthesis.

More explicit economic analysis would have made clear why Nelson's argument is the correct one. The flaw of scientific management is what Hayek called the pretense of knowledge. The case for central planning, whether economy-wide or in the special realm of the Forest Service, is that a corps of experts is the best way to learn everything needed to reach the optimal decision. As Nelson recognizes, this case is invalid; the experts cannot readily secure the information. This alone precludes insulation from the political pressures of those affected. R