I thank Professor Lisa Heinzerling for reviewing my book, How to Regulate: A Guide for Policymakers.¹ It is an honor to have someone of Heinzerling’s renown engage with one’s work, even when the engagement is critical. In the end, though, Heinzerling’s criticisms rest on a misconstrual of the project I undertook. A proper understanding of my book’s limited, though important, objectives reveals why Heinzerling’s critiques are off-base.

In this response essay, I first describe How to Regulate’s goals. I then explain why Heinzerling’s primary criticisms of the book—that it “ignore[s] the role of law in our regulatory system,”² stacks the deck against regulatory interventions,³ is too concerned about over-restriction,⁴ and improperly precludes goals other than efficiency⁵—are unfounded.

I. THE OBJECTIVES OF HOW TO REGULATE

When it comes to regulation, there is a hole in the traditional law school curriculum. Law schools provide systematic training on the process of regulating (for example, Administrative Law courses) and the interpretation of rules (for example, courses in Legislation/Regulation, or “Leg-Reg”). And of course, many law school courses describe the mandates and prohibitions imposed by discrete areas of regulation (for example, Environmental Law, Securities Regulation, Food and Drug Law). Most law schools, however, do not offer systematic training on what constitutes a good—or even an efficient—regulation. While many

¹ Wall Family Chair in Corporate Law and Governance, University of Missouri Law School.
² Heinzerling, 85 U Chi L Rev at 2016 (cited in note 1).
³ Id at 2026–32.
⁴ Id at 2032–35.
⁵ Id at 2035–37.
Law schools offer law and economics courses that examine the efficiency of various rules, those courses tend to focus on traditional common law doctrines, not contemporary regulatory interventions.

Law schools’ failure to offer systematic training in the normative analysis of alternative regulatory approaches is odd given the significant role lawyers play in crafting the substance of regulatory interventions. A substantial percentage of federal and state legislators are lawyers, and legislators often employ staff attorneys who take the lead in drafting and evaluating proposed legislation. Federal and state agencies are full of lawyers who are charged with writing rules, determining which policy positions the agencies will stake, and bringing enforcement actions that flesh out what particular regulations require. Even lawyers who lack the power to implement regulatory policy directly must often advocate one regulatory policy over another, as when a lawyer tries to persuade an agency to adopt or reject a particular regulatory approach or argues to a court that an agency’s rule is arbitrary and capricious. It seems, then, that future (and current) lawyers need systematic training on what makes for a socially desirable regulation. My primary goal in writing How to Regulate was to provide such training.

Of course, an author always wants to enhance his readership, so I addressed my book not just to lawyers, law students, and people with power to implement regulatory policy directly, but also to people who are simply interested in regulatory policy. Reasoning that such readers might contribute to policy formulation by influencing others’ views (or just by voting), I somewhat generously labeled those readers “policymakers,” which, according to my book’s subtitle, comprised its intended audience.

The question I sought to address—what, as a substantive matter, constitutes a good regulation?—could easily have become unmanageable. In common parlance, “regulation” encompasses a host of governmental interventions aimed at many different ends (enhancing welfare, ensuring individual dignity,

---


fostering equality, etc.). Moreover, as the history of ethical theory attests, the meaning of “good” is highly contestable; it could mean welfare-maximizing, or it could incorporate such considerations as equality, respect for autonomy, cultivation of virtue, etc. To keep the book from becoming unwieldy, I had to limit its focus, which admittedly prevented it from giving an exhaustive answer to the question it addresses.

I limited the book’s analysis in two ways. First, I defined regulation, for purposes of the book, quite narrowly. Many common law doctrines address market failures (for example, nuisance rules help alleviate externalities), but most people do not think of the traditional common law as regulation, and there are already many fine books addressing the efficiency of competing common law rules. I therefore excluded the common law from my analysis. I also parted with scholars who have defined regulation to include all governmental directives, regardless of their end. Professor Barak Orbach, for example, has defined regulation as “government intervention in the private domain” or “a binding legal norm created by a state organ that intends to shape the conduct of individuals and firms.” While those are serviceable definitions of regulation, I limited my book’s consideration only to governmental directives aimed at a particular objective: correcting private ordering defects that systematically reduce social welfare.

9 See Lambert, How to Regulate at 1–6 (cited in note 1) (defining “regulation” for purposes of the book). Note that I repeatedly emphasized that my narrow definition of regulation was “for purposes of this book.” See id at x, xi, 3, 5, 29, 253.
10 See Keith N. Hylton, Nuisance (Encyclopedia of Law and Economics, Jan 2014), online at http://www.researchgate.net/publication/304092509_Nuisance (visited Feb 26, 2019) (Perma archive unavailable) (“Nuisance law optimally regulates activity levels. The law induces actors to choose the socially optimal level of an activity by imposing liability when the externalized costs (of the activity) are substantially in excess of externalized benefits or far in excess of background external costs.”).
12 Lambert, How to Regulate at 4 (cited in note 1).
14 Lambert, How to Regulate at 4 (cited in note 1).
I also constrained the book’s analysis by settling on a criterion by which to evaluate different regulatory approaches. Because the book’s subject is government interventions to correct welfare-reducing private ordering defects (for example, market failures), it unsurprisingly judges different regulatory approaches according to their likely effect on total social welfare.\(^\text{15}\) For every regulatory approach considered, the book asks (1) how would social welfare be enhanced by this intervention; (2) how might this intervention reduce social welfare; and (3) how do the likely welfare effects of this intervention compare to those of alternative approaches, including the alternative of not intervening at all?\(^\text{16}\) The book thus provides guidance as to which regulatory approaches are likely, in light of both market and governmental failures, to maximize total social welfare.

The book does not, however, go the next step and argue that policymakers should automatically implement the welfare-maximizing regulatory approach. It concedes that distributional or other considerations might justify a departure from welfare-maximization,\(^\text{17}\) but it contends that examination of likely welfare effects should be part of the analysis policymakers undertake in selecting regulatory approaches. In other words, if they choose to depart from welfare-maximization, they should do so with eyes open to the welfare being sacrificed.\(^\text{18}\)

By its own description, then, How to Regulate addresses a broad audience on a narrow, but important, topic: it describes, for anyone interested in public policy (“policymakers,” generously defined), how a large but limited set of government interventions (those aimed at correcting welfare-reducing defects in private ordering) are likely to fare along a key dimension (enhancing total social welfare).

\(^\text{15}\) Id at 6 (observing that “[l]imiting our inquiry to how to regulate so as to maximize social welfare saves us from having to compare incommensurable values (efficiency and equity)).

\(^\text{16}\) Id at 1415 (describing physician model, which involves comparison of the marginal benefits and costs of potential interventions).

\(^\text{17}\) Id at 254 (“There are sound reasons for concluding that governmental directives should sometimes sacrifice a measure of wealth in favor of greater equity.”).

\(^\text{18}\) Id at 6 (observing that “there is great benefit in knowing how to regulate so as to maximize social welfare even if one chooses to pursue another objective”). Id at 253 (“Even if one ultimately decides that the best approach is not the one that maximizes welfare, regulators should know what approach would generate the greatest welfare and should have some sense of the wealth they’re sacrificing by selecting an alternative regulatory regime.”).
II. WHY PROFESSOR HEINZERLING’S CRITICISMS ARE OFF-BASE

Professor Heinzerling has identified what she says are four “central defects” in How to Regulate.19 Those asserted deficiencies, however, are based on a misconstrual of what the book purports to do. Evaluated in light of the book’s actual objectives, the alleged defects dissipate.

A. Ignoring the Role of Law

Correctly observing that How to Regulate describes its intended audience of “policymakers” quite broadly, Heinzerling spots a problem. “Directing the same decision-making guidance to all those who play any role in government,” she writes, “ignores the differing legal constraints of these diverse actors.”20 Specifically:

[T]he people largely making the decisions Lambert discusses—the leaders and staffs of agencies charged with administering regulatory statutes—are constrained by the limits of those underlying statutes. They are not free to pick among the relatively narrow regulatory options Lambert favors. To ignore these constraints is effectively to ignore the role of law in our regulatory system.21

It is of course true that different policymakers, broadly defined, face different legal constraints in implementing regulatory approaches. Legislators may exercise all the power conferred upon them by governing constitutions and thus possess the broadest power to structure regulatory approaches. Agency officials, who exercise legislatively conferred authority, may adopt rules authorized by the governing statutes, advocate statutory change, and influence policy by exercising enforcement discretion; they may not, however, alter regulatory approaches in a manner inconsistent with legislation. Nongovernmental “policymakers”—lawyers arguing for one position over another, teachers who shape future leaders, engaged citizens who influence their friends and cast their own votes—have only the power of persuasion; they have no ability to implement regulatory poli-

---

19 Heinzerling, 85 U Chi L Rev at 2016 (cited in note 1). Heinzerling catalogues three “central features” of How to Regulate that are also, she says, the book’s “central defects.” Id. Because the third of those purportedly involves “[t]wo forms of false equivalence,” id at 2032, I have separated it into two, producing four claims of deficiency.
20 Id at 2016.
21 Id.
Understanding How to Regulate
cy directly. It goes without saying that different types of policymakers will play different roles in shaping the content of regulatory policies.

Heinzerling suggests that I have counseled agency officials to implement whatever regulatory approach my analysis deems optimal in their particular area, even if legislation commands something different.\(^{22}\) She chides me for not "starting with respectful attention to statutory constraints" and instead "acting as though they do not exist."\(^{23}\) Had I shown proper respect for the law, she says, I would have instructed policymakers to "ask how existing law constrains [their] decision[s] on regulation" before they compare the relative merits of alternative regulatory approaches.\(^{24}\)

I did not insert such an instruction for several reasons. First, doing so seemed unnecessary. Is there not a presumption that when law professors call for substantive reform of rules they are arguing for those rules to be altered via legitimate means? While policy scholars occasionally recommend flouting the law to achieve some desirable outcome, they typically do so explicitly.\(^{25}\) I assumed—that silence on whether to break the law would be interpreted as "Don't do it" and that the burden to say otherwise would be on those calling for law-breaking.

Second, it is obvious from my book's focus on regulatory substance and its broad definition of policymakers that I was offering instruction on how to identify optimal regulatory approaches, not how to impose those approaches. Imposition relates to the process of regulating, which is well-covered in the law school curriculum and is expressly not my book's subject. Instructing a diverse group of policymakers on the steps each should take to impose socially optimal regulatory policies would have been quite a task and would have resulted in a much longer book focused on very different matters. The point of How to Regulate was to provide instruction on how to identify welfare-maximizing regulatory approaches for addressing different mar-

\(^{22}\) Id at 2021 ("These institutions [administrative agencies] . . . are not empowered to follow economic analysis wherever it may lead, as Lambert would have them do. They are also not empowered to stand down if they do not find one of the varieties of market failure Lambert identifies.").

\(^{23}\) Heinzerling, 85 U Chi L Rev at 2025 (cited in note 1).

\(^{24}\) Id.

\(^{25}\) See generally, for example, Charles Murray, By the People: Rebuilding Liberty Without Permission (Crown Forum 2015).
ket failures, so that each diverse policymaker could then play her particular role—subject to whatever constraints she was fac ing—in promoting that approach.26

Third, a preliminary instruction, “Don’t violate existing law,” would have been pointless for most of the policymakers to whom my book is addressed. Absent some constitutional constraint, legislators can always change existing law, and nongovernmental “policymakers” (for example, teachers and other opinion influencers, voters) are free to promote whatever regulatory approaches they want. Even agency officials who are required by legislation to implement some nonoptimal regulatory approach may advocate a legislative change. The analytical approach my book prescribes helps them determine when they ought to do so.

It would have been silly, then, to “add a step to [my] analytical framework” and explicitly instruct policymakers to “ask how existing law constrains [their] decision on regulation.”27 The fact is, existing law places no constraints on a policymaker’s decision about what regulatory approach would be welfare-maximizing. The law may constrain her implementation of such approach, but the point of How to Regulate was simply to help her identify that approach.

B. Stacking the Deck Against Regulation

How to Regulate prescribes an analytical process for deciding which regulatory approaches optimally address various private ordering defects. In doing so, Heinzerling argues, the book disfavors regulation vis-à-vis government interventions aimed at achieving nonregulatory ends (for example, revenue-raising, redistribution).28 The effect of this asymmetric treatment of government policies, she says, is to entrench the existing distribution of wealth. She explains:

---

26 See Lambert, How to Regulate at x (cited in note 1) (“[The book’s] goal is to help you think more clearly about one particular set of government decisions: those involving regulation (which we’ll soon define). I hope, and I believe, that the book will enable you to make persuasive arguments in favor of better regulatory decisions that produce greater human welfare.”).

27 Heinzerling, 85 U Chi L Rev at 2025 (cited in note 1).

28 Id at 2026 (“In Professor Lambert’s framework, some government decisions may proceed without cost-benefit analysis and without attention to the balance of decision costs and error costs, while others may proceed only after satisfying demanding economic tests. Lambert’s framework thus favors the former kinds of government decisions over the latter.”).
The only policy choices that Lambert would subject to his intensive economic analysis are those that involve regulation as he defines it. Government actions that do not involve regulation in Lambert’s sense get a free pass. The dividing line Lambert erects between regulation and other government conduct is not neutral. It favors stasis over change and keeps wealth in the hands of whose who already have plenty of it even as it would bless greater redistributions from the less to the more advantaged.29

To illustrate her point, Heinzerling offers an example:

Lambert does not regard most of tax law as “regulatory” because he does not regard government action with a redistributive purpose as regulatory.30 As a result, massive tax giveaways to the rich at the expense of the poor, done for the “redistributive” purpose of shifting more money to the rich, would completely evade Lambert’s analytical structure. Meanwhile, “regulation” ameliorating the consequences of this maldistribution would be subject to a strict cost-benefit test. Tax breaks and giveaways for the fossil fuel industry, for example, would survive without resort to cost-benefit analysis, but “regulation” aiming to tame the externalities imposed by this industry would need to pass through the cost-benefit sieve.31

There are several problems with these criticisms. As an initial matter, the claim that I have given “[g]overnment actions that do not involve regulation” a “free pass” is ludicrous.32 Suppose an author wrote a book, How to Bake a Chocolate Cake. The book included instructions such as “preheat oven to 350 degrees”; “blend together eggs, butter, flour, and sugar”; “grease baking pan”; etc. Would it be reasonable to infer that the author

29 Id (internal citation omitted).
30 This is inaccurate. The book’s definition of regulation does not regard interventions as regulatory if they are aimed at redistribution and do not also seek to correct a welfare-reducing defect in private ordering. A redistributive or revenue-raising intervention that also reduces the inefficiency resulting from a market failure would count as regulation for purposes of the book. Lambert, How to Regulate at 5 (cited in note 1) observing that “only those threat-backed governmental directives that are aimed solely at . . . [an] objective besides correcting welfare-reducing defects in private ordering are excluded from the definition of regulation. Many governmental directives raise revenue, redistribute wealth, or express legislators’ views but also seek to mitigate a wealth-reducing defect in private ordering”).
31 Heinzerling, 85 U Chi L Rev at 2031 (cited in note 1) (internal citation omitted).
32 Id at 2026.
was saying a baker need not follow those instructions, or similar ones, when making brownies? Of course not. In expressly prescribing the steps required to bake a chocolate cake, the author said nothing about how other desserts should be baked. He in no way implied that a brownie baker could refrain from those same steps, much less that there are no preliminary steps involved in baking brownies. By the same token, in prescribing the analysis policymakers should follow in deciding what regulatory approaches are optimal, I said nothing about how they should select among nonregulatory government interventions. I did not imply that none of the analytical steps involved in selecting regulatory policies (for example, consider the range of possible interventions) would be appropriate in choosing among nonregulatory interventions, much less that no analysis should occur prior to intervention.

Heinzerling seems to have invoked some sort of expressio unius canon in interpreting How to Regulate: because the book prescribed a process for making one sort of decision, she says, it implicitly excepted other types of decision-making from the requirement to utilize that (or any!) process.33 Throughout the book, however, I clearly stated that I was addressing only regulatory decisions, narrowly defined. At the outset, for example, I announced that “[the book’s] goal is to help you think more clearly about one particular set of government decisions: those involving regulation (which we’ll soon define).”34 I later explained that decisions about redistributive interventions may require policymakers to trade off equity against efficiency, and I conceded ignorance on how to strike that tradeoff.35 I even expressed hope that someone would write another book “set[ting] forth a plausible approach to deciding when and to what extent efficiency should be sacrificed for equity (suggested title: How to Redistribute: A Guide for Policymakers).”36 Given that I expressly limited my inquiry to how to regulate and acknowledged that some other analysis would be appropriate for making redistributive decisions, it is unreasonable to conclude that I was implicit-

---

33 Expressio unius est exclusio alterius (“the expression of the one is the exclusion of the other”), sometimes referred to as the negative-implication canon, is a classic canon of statutory and contract interpretation. See Antonin Scalia and Bryan A. Garner, Reading Law: The Interpretation of Legal Texts 107 (West 2012) (citing authorities).
34 Lambert, How to Regulate at x (cited in note 1).
35 Id at 256.
36 Id.
ly giving a “free pass” to nonregulatory government interventions.\(^{37}\)

Moreover, even if my prescriptions would make it harder to regulate than to redistribute, it seems unlikely that this would entrench the existing wealth distribution and favor the rich, as Heinzerling suggests. If redistributive interventions got a “free pass,” as Heinzerling (wrongly) says they would under my approach,\(^{38}\) wouldn’t that make it easier to use state power to achieve a more equitable distribution of wealth? In suggesting that the distributional effects would be adverse, Heinzerling hypothesizes a tax policy aimed at redistributing wealth toward the fossil fuel industry.\(^{39}\) But tax subsidies to corporations or the wealthy are rarely if ever justified on distributional grounds; they are instead based on some (perhaps pretextual) claim that the favored entity generates positive externalities worthy of subsidization. Any tax policy so justified would count as regulation in my scheme and would be subject to the analysis the book prescribes.\(^{40}\) Purely redistributive policies—those not aimed at enhancing efficiency by correcting a market failure—virtually always operate in the opposite direction: from rich to poor. If anything, then, giving a free pass to purely redistributive policies (something How to Regulate does not do) would seem to combat, not entrench, economic inequality.

To bolster her effort to construe my prescriptions for regulatory decision-making into a nefarious scheme to protect the rich, Heinzerling erects a straw man. At the outset of How to Regulate, I limited the book’s focus to exclude the common law, while conceding that many common law doctrines (for example, nuisance) perform regulatory functions by reducing the inefficiencies occasioned by market failures (for example, negative externalities).\(^{41}\) I did this for a couple of reasons. First, there are already many fine books and articles that analyze the efficiency of traditional common law doctrines; I could have added little.\(^{42}\)

---

37 See Scalia and Garner, Reading Law at 107 (cited in note 33) (observing that “[v]irtually all the authorities who discuss the negative-implication canon emphasize that it must be applied with great caution, since its application depends so much on context”; citing authorities).

38 See Heinzerling, 85 U Chi L Rev at 2026 (cited in note 1).

39 See text accompanying note 31.


41 Id at 4. See also note 10.

42 See note 11 and accompanying text.
In addition, I wanted to focus my book on the interventions most people think of as “regulation,” and people typically do not apply that label to the traditional common law. Heinzerling first contends (wrongly, for reasons stated above) that excluding the common law from my analysis treats it “more leniently than” regulation. She next speculates—with no evidence—that I would not approve of using traditional common law doctrines to address new problems and achieve a progressive outcome. She concludes that her speculation proves that my real goal is to entrench the status quo.

Specifically, she writes:

This approach [of excluding traditional common law rules from the book’s definition of regulation] sets the table nicely if one’s objective is to allow the regulatory system to change as little as possible in response to changing circumstances. One suspects, for example, that despite Lambert’s consistently favorable invocation of nuisance law as a background principle that does not require a policymaker’s cost-benefit analysis (pp 47–49), he probably would not give a free pass to current lawsuits, sounding in public nuisance, that attempt to hold fossil fuel companies liable for their contributions to global climate change. Yet these lawsuits draw on the same venerable nuisance law principles Lambert otherwise embraces. Lambert may like the common law system better when it addresses old problems with old principles than when it addresses new problems with old principles, but a principled basis for this preference does not appear in Lambert’s analysis.

She then contends that my selective embrace of common law principles (good for old problems, bad for new ones) betrays my real intent—to protect the status quo:

43 Heinzerling, 85 U Chi L Rev at 2027 (cited in note 1).
44 Id at 2028.
45 Id at 2029.
46 Citation in original. Nowhere on pages 47–49 of my book, or anywhere else therein, did I say that nuisance law is a background principle that does not require cost-benefit analysis. As noted, I simply did not address the analysis required for common law interventions, which the book deemed to be non-regulatory. Moreover, the common law of nuisance, in attaching liability only to unreasonable interferences with others’ use and enjoyment of their property, actually incorporates cost-benefit balancing into the rule. See note 10.
47 Heinzerling, 85 U Chi L Rev at 2027 (cited in note 1).
To argue that the common law system, which Lambert excludes from his definition of regulation, must not address new problems, or adjust its principles to take account of new problems, would simply prove my central point: Lambert’s framework favors stasis over change even as we encounter new problems.\textsuperscript{48}

Of course, I never argued that the common law should not address new problems. Heinzerling speculated that I would do so. She “suspect[ed]” that I would “probably” oppose nuisance suits against fossil fuel companies, and she asserted that I “may like” for the common law to stick to old problems.\textsuperscript{49} It is not my words but rather her own speculations that, she says, “prove [her] central point” that my framework for regulatory decision-making “favors stasis over change.”\textsuperscript{50} That is not how proof works.

These are the facts: I wrote a book to help identify which regulatory interventions are most likely to maximize total social welfare. To keep the book from becoming unwieldy, I defined regulation narrowly to exclude the common law (which many other scholars have addressed) and purely redistributive interventions (which entail a thorny efficiency-versus-equity tradeoff about which I was unprepared to offer guidance). I never suggested that either common law rules or purely redistributive interventions should get a “free pass.”\textsuperscript{51} And I certainly never suggested that common law principles should be restricted to old problems.\textsuperscript{52} The fact that Heinzerling had to add speculation to speculation in order to “prove [her] central point” gives away the game.\textsuperscript{53} How to Regulate would not “rig[ ] the system against change,” as she charges.\textsuperscript{54}

C. Treating Under- and Over-Restriction Symmetrically

How to Regulate aims to help policymakers decide which regulatory interventions are most likely to maximize social welfare. It thus begins by identifying the sources of potential wel-
One obvious source is under-restriction—failure to condemn conduct that imposes net harms (false acquittals). A second source is over-restriction—prohibiting or discouraging conduct that is, on balance, beneficial (false convictions). Taken together, the welfare losses from false acquittals and false convictions comprise the “error costs” of a regulatory approach. Error costs may be reduced, of course, by making a regulation more nuanced so that it is better able to target the bad without chilling the good. Nuance, though, generates its own costs: it increases the difficulty of deciding whether conduct is permitted. Those “decision costs” are borne by business planners (in deciding what they are allowed to do) and adjudicators (in determining whether challenged conduct was permitted).

False acquittal error costs, false conviction error costs, and decision costs are intertwined. Reducing the risk of false acquittals (for example, by broadening a rule’s prohibitions) threatens false convictions; curtailing false convictions (for example, by shrinking the scope of liability or expanding defenses) threatens false acquittals; attempting to reduce both sources of error simultaneously (for example, by making the rule more nuanced) raises decision costs. In light of this unhappy situation, How to Regulate counsels policymakers not to pursue perfection along any of these dimensions but instead to seek optimization by selecting the regulatory policies that minimize the sum of error and decision costs.

To achieve that overarching goal, the book advises policymakers to think like doctors. When confronted with a social situation that seems undesirable (a “symptom”), policymakers should first ask why the symptom is occurring (“diagnose the disease”). They should then catalogue the policy approaches that could address that disease (the “range of remedies”) and assess the implementation difficulties and potential adverse consequences (“side effects”) of each. They should then determine which remedy offers the greatest net benefit to society, the “patient.” This analytical approach brings on screen the considera-

---

55 See Lambert, How to Regulate at 10–11 (cited in note 1).
56 Id at 10.
57 Id at 11.  
58 Id at 11–12.
59 Lambert, How to Regulate at 12–13 (cited in note 1).
60 Id at 14–15.
tions that will help policymakers select regulatory approaches that minimize the sum of error and decision costs.

After setting up this general approach, How to Regulate proceeds to apply it to six oft-cited bases for regulating: externalities, public goods, market power, information asymmetry, agency costs, and the cognitive and behavioral limitations identified by behavioral economists. For each basis for regulating, the book describes the “disease” giving rise to welfare losses, the range of regulatory approaches available for reducing those losses, and the pros and cons of each such approach.

Heinzerling contends that the book errs in treating the welfare losses from under-restriction the same as those of over-restriction.61 Instead, she says, policymakers should be free to put a thumb on the scale and treat loss from under-restriction as “worse” than the same quantum of loss from over-restriction.62 She defends such a pro-restriction bias on grounds that the benefits of regulation are harder to establish than the costs. First, she says, setting the probability of a future harm too low will shrink the expected benefit of preventing that harm.63 In addition, regulatory benefits are difficult to monetize because they are “not naturally stated in monetary terms.”64 Moreover, applying excessive discount rates to future benefits can cause the apparent benefits of regulating to appear unduly small.65

Of course, the difficulties of assessing probabilities, monetizing effects, and setting discount rates can also cause mistakes in the pro-restrictive direction. If the probability of a potential harm that a particular regulation would reduce is set too high, or if the probability that the regulation will itself cause an adverse effect is set too low, then the analysis will be biased toward the regulatory fix under review. If some benefits of reduced restrictiveness—for example, an increase in innovation or business activity, healthier lifestyle choices resulting from higher in-

62 Id at 2032–34.
63 Id at 2033 (“Catastrophes can be flattened out, made apparently acceptable, simply by multiplying a terrible amount of harm by a low chance.”).
64 Id at 2034.
65 Heinzerling, 85 U Chi L Rev at 2034 (cited in note 1) (discussing “the deregulatory power of a cost-benefit analysis feature that Lambert only glancingly touches upon: the discounting of future benefits to present value”). Somewhat bizarrely, Heinzerling simultaneously (1) criticizes How to Regulate for not discussing the need to discount future benefits in conducting cost-benefit analyses and (2) argues that the discounting of future benefits biases cost-benefit analyses against regulatory interventions. Id at 2034–35.
comes—are not easily monetizable, they might not be fully accounted for. And if the discount rate applied to a potential restriction’s future benefits is set too low (or that applied to its future costs too high) the analysis will be biased in favor of that restriction. Prorestrictive bias may also sneak in if the agency officials charged with conducting the cost-benefit analysis would personally benefit—say, through greater power, larger budgets, or enhanced job prestige—from a more restrictive regulatory approach.

Heinzerling is correct that cost-benefit analyses sometimes utilize bad inputs and may be inaccurate. The proper fix for that problem, though, is to obtain and use better inputs, not to systematically bias the analysis by assuming that one set of costs is somehow “worse” than another set of costs of the same magnitude. Suppose, for example, that policymakers were considering whether to ban production of a strain of genetically modified wheat that could lower food prices but might cause adverse health effects. It could be difficult to determine the probability of health problems, the cost of such problems should they arise, the magnitude of cost savings that would be foregone if the wheat were banned, and the proper rates by which to discount all these future effects. The appropriate response to that difficulty, though, would be to make the best possible estimate. It would not be to automatically treat the harms from allowing the wheat as “worse,” on a per-dollar basis, than the harms from banning it.

How to Regulate did not provide detailed instruction on tallying regulatory costs and benefits because it is not a manual on how to conduct cost-benefit analyses. Indeed, the term “cost-benefit analysis” appears on only three of the book’s 256 pages of text,66 and only once does the book say anything about how such analysis should be conducted. Its sole instruction is that cost-benefit analysis should incorporate the opportunity cost of foregoing other regulatory approaches.67

To illustrate that point, the book hypothesized two alternative regulatory approaches to some problem.68 Policy A would impose implementation costs of $60 million and produce benefits of $70 million, while a less restrictive approach, Policy B, would cost $25 million to implement and would generate $50 million of

---

66 See Lambert, How to Regulate at 13, 245, 248 (cited in note 1).
67 Id at 13.
68 Id.
benefits. While each of these policies might appear to create more benefit than cost, the book argued that Policy A would not pass muster under a properly conducted cost-benefit analysis. That is because a cost of selecting one policy is the surplus foregone by not selecting the other (this is an opportunity cost). Policy A creates $10 million in surplus; Policy B, $25 million. Adding $25 million of cost to Policy A (the opportunity cost of foregoing Policy B) causes Policy A to fail cost-benefit analysis: The costs of the policy are $85 million, while the benefits are only $70 million. By contrast, Policy B still offers net benefits after opportunity costs are accounted for: It generates benefit of $50 million while imposing costs of $35 million, including the $10 million of surplus foregone by not selecting Policy A.

Heinzerling says this analysis is wrong:

Lambert’s reasoning is misleading. Choosing the approach that produces higher gross benefits overall does not mean losing any benefits (or in Lambert’s terminology, imposing costs in terms of benefits foregone). It does mean spending more, but that extra spending is still a net improvement and may be favored for reasons not reflected in the limited analysis. In erroneously stating that the choice of an option with the greatest gross benefits actually results in a loss of benefits, Lambert avoids facing the actual consequences of his preferred decision-making test: in the scenario he envisions, his test will prefer minimizing costs over maximizing benefits.

There are at least three errors here. First, on the facts of my hypothetical, choosing Policy A over Policy B does entail a loss of benefits. Choosing any policy means not choosing its alternative. If Policy A is selected, the surplus from Policy B is sacrificed, and vice-versa. This is nothing more than a recognition of the definition of “cost.” As a leading introductory economics test explains, “[T]he cost of obtaining anything is the value placed on whatever must be sacrificed in order to obtain it.”

Second, Heinzerling is wrong in saying that while selection of the lower net benefit option involves spending more, “that ex-

69 Id.
70 Heinzerling, 85 U Chi L Rev at 2035 (cited in note 1).
71 Paul Heyne, Peter Boettke and David Prychitko, The Economic Way of Thinking 19 (Pearson 10th ed 2002).
tra spending is still a net improvement.”\textsuperscript{72} It is not. Heinzerling seems to be saying that the extra spending in moving from Policy B to more restrictive Policy A (from $25 million to $60 million) is acceptable because the more restrictive policy still creates greater benefit ($70 million) than its implementation cost ($60 million). But if the objective is maximization of social welfare through a regulatory system that minimizes the sum of decision and error costs, then the costs and benefits of any governmental restriction should be compared at the margin. Doing so in this case shows that the extra spending on Policy A is a waste: The added restrictiveness of that policy costs $35 million (that is, it increases implementation costs from $25 million to $60 million), but it produces only $20 million in additional benefit ($70 million versus $50 million). Spending an additional $35 million to get additional benefits of $20 million is in no sense a “net improvement.”

Third, Heinzerling errs in stating that the sort of cost-benefit analysis How to Regulate counsels “will prefer minimizing costs over maximizing benefits.”\textsuperscript{73} A simple example proves otherwise. Suppose that Policy X costs $25 million to implement and produces benefits of $50 million, while more restrictive Policy Y costs $30 million and produces benefits worth $60 million. Under a cost-benefit analysis that incorporates the opportunity cost of alternative regulatory approaches, the policy with the higher implementation costs (Y) would pass muster, and its less restrictive alternative (X) would not. The full cost of Policy X (including the opportunity cost of not picking Y) would be $55 million,\textsuperscript{74} while the benefits produced would be only $50 million. For more restrictive and costlier-to-implement Policy Y, costs would also be $55 million ($30 million implementation plus $25 million opportunity), but benefits would be $60 million. It is not the case, then, that incorporating regulatory opportunity costs into cost-benefit analysis “will prefer minimizing costs over maximizing benefits.”

\textsuperscript{72} Heinzerling, 85 U Chi L Rev at 2035 (cited in note 1).
\textsuperscript{73} Id.
\textsuperscript{74} This is comprised of $25 million in implementation cost plus $30 million in surplus loss from not selecting Policy Y.
D. Precluding Distributional and Other Non-Efficiency Objectives

Heinzerling concludes her review by criticizing How to Regulate for encouraging a regulatory system aimed solely at wealth-maximization, regardless of its distributive effect. “In Lambert’s system,” she writes, “regulators should strive to maximize welfare, by which he means they should maximize overall wealth.” Counseling policymakers to pursue wealth-maximization, she says, is particularly inappropriate given current levels of wealth inequality: “[i]n a country in which the richest 1 percent of families control 38 percent of the wealth, it has become ever less tenable to equate the wealth of the few with the welfare of the many.”

Once again, Heinzerling has misconstrued my advice on how to identify the regulatory policies that maximize total social welfare as a directive to impose those policies. In fact, How to Regulate never says regulators “should strive to maximize welfare.” Indeed, while the book advises policymakers to identify the welfare-maximizing regulatory policy (so that they will know what they are giving up if they choose to do something different), it concedes that it may be appropriate not to implement that policy and instead to pursue a regulatory approach that produces less wealth but spreads it more evenly:

Regulation in the broader sense is routinely driven by distributional concerns and often calls for people to take actions that reduce overall surplus in the name of distributing wealth more evenly. Is this book suggesting that such regulation is categorically improper? Not at all. There are sound reasons for concluding that governmental directives should sometimes sacrifice a measure of wealth in favor of greater equity.

---

75 Id at 2035–36 (internal page references omitted).
76 Id at 2036–37.
77 Heinzerling, 85 U Chi L Rev at 2035–36 (cited in note 1). Heinzerling points to the statement, “the analysis in this book has generally assumed that the objective of regulatory interventions is to make society as a whole as wealthy as possible.” Lambert, How to Regulate at 253 (cited in note 1). Almost immediately after that statement, though, the book acknowledges that it is sometimes appropriate to choose policies that generate more equitable outcomes over those that maximize overall social welfare. See id at 254–56.
78 Lambert, How to Regulate at 254 (cited in note 1).
The book then suggests situations in which a departure from wealth-maximization may be appropriate, as when the efficiency advantages of the welfare-maximizing policy are modest and the distributional advantages of a less efficient policy are substantial.\textsuperscript{79} It also recognizes that humans (and other primates) display an innate preference for more equitable outcomes and are often willing to sacrifice some measure of wealth in order to achieve greater equity, as revealed by the Ultimatum Game (and experiments with monkeys).\textsuperscript{80} “If that’s the case,” the book states, “our regulatory regime should allow for approaches that may not appear to maximize aggregate welfare but do seem to produce more equitable outcomes.”\textsuperscript{81}

Heinzerling is correct in observing that \textit{How to Regulate} offers no advice on how policymakers should make the tradeoff between equity and efficiency.\textsuperscript{82} Conceding that point, the book offers an explanation:

So why did this book leave that question untouched? In addition to the reasons set forth above (i.e., the discussion would have been too unwieldy; policymakers still need to know what approaches maximize social welfare; there are better ways to ensure equity than through regulation\textsuperscript{83}), there is the simple fact that your author has no idea what the answer is. At this point, all he can say is that regulators should recognize that such a trade-off exists and, if they choose to make it, they should do so with eyes wide open.\textsuperscript{84}

\textsuperscript{79} Id.

\textsuperscript{80} Id at 255–56 (describing the Ultimatum Game, in which human participants routinely express a willingness to give up economic gain if it is allocated too inequitably, and experiments in which female capuchin monkeys displayed same tendency), citing Sarah F. Brosnan and Frans B. M. de Waal, \textit{Monkeys Reject Unequal Pay}, 425 Nature 297 (2003).

\textsuperscript{81} Lambert, \textit{How to Regulate} at 256 (cited in note 1).

\textsuperscript{82} Heinzerling, 85 U Chi L Rev at 2036 (cited in note 1).

\textsuperscript{83} Heinzerling’s selective quotation misconstrues what the book said on this last point. She quotes the book as follows: “'[R]egulate so as to maximize social welfare,' he advises, ‘and then just engage in redistribution to achieve an outcome that is deemed equitable’ (p 254 (emphasis added)).” Id. This suggests that the book’s instruction is that direct redistribution is always a better means of ensuring equity than is regulation. The book’s actual claim is less strident: “[R]egulation is frequently a clumsy tool for achieving distributional objectives. Often, the better approach is to regulate so as to maximize social welfare and then just engage in direct redistribution to achieve an outcome that is deemed to be equitable.” Lambert, \textit{How to Regulate} at 253–54 (cited in note 1).

\textsuperscript{84} Lambert, \textit{How to Regulate} at 256 (cited in note 1).
In light of this dodge, Heinzerling may be right in concluding that *How to Regulate* “is of limited utility in guiding us through the regulatory system we have in the pressingly unequal world in which we live.” She is wrong, though, in suggesting that the book says “regulators should strive to maximize welfare, by which [it] means they should maximize overall wealth.” The book never tells regulators what ends they should pursue; it merely instructs policymakers on how to identify which regulatory policies are most likely to maximize social welfare. That is something policymakers should know regardless of what goal(s) they choose to pursue or what policy they ultimately implement.

**CONCLUSION**

Markets sometimes fail, and so do government efforts to correct market failures. *How to Regulate: A Guide for Policy-makers* endeavors to help government officials and interested citizens identify which interventions are most likely to minimize the aggregate welfare losses from market and government failures.

A book examining both market and government failures invites detractors from all sides. Market fundamentalists will be put off by all the market failure talk; those with great confidence in government’s ability to fix social ills, by the continued emphasis on government’s systematic limitations. Perhaps not surprisingly, then, *How to Regulate* has proven to be somewhat of a Rorschach test for many readers. One reviewer, a constitutional conservative, chided the book for embracing progressive assumptions about society and the state. Professor Heinzerling, a progressive, sees in the same text a scheme to entrench the status quo and stymie progressive reforms. One wonders if these reviews reveal more about their authors’ ideological priors than about the actual content of the book.

---

85 Heinzerling, 85 U Chi L Rev at 2037 (cited in note 1).
86 Id at 2035–36.
Perhaps *How to Regulate* is out of step with its era. Ours is not an age of nuance. We are increasingly polarized along ideological lines, and we seem ever less willing to entertain views not held by fellow members of our tribes. *How to Regulate* asks its readers to embrace nuance and to concede that “the other side” makes some good points. Heinzerling is right that it does not answer some very hard questions—for example, how to trade off efficiency versus equity—and for that reason the book does not give a definitive answer to the question posed in its title. It does, however, offer a good bit of helpful advice about how to identify regulatory policies that will maximize social welfare in light of inevitable market and government failures. And for that reason, it might be exactly the sort of regulation book this polarized era needs.