

Techniques of Regulatory Intervention

New Legal Tools to Solve Wicked Problems

Our depiction of governmental action under the police power has to this point in the book followed a fairly conventional script. We have viewed the strategies of good governing as mainly involving regulation, and have supposed that by regulation we mean the typical forms of command-and-control governance, constructed through some measure of public law, usually criminal law. Civil redress plays a role, but note that the basic mechanisms of civil justice come in the form of what we regard as private law, with courts working to resolve controversies by adjudicating claims through the civil justice system. While command-and-control prohibition through the criminal law is indeed the model example of governmental action under the police power, a richer account of good governing should look at the variegated techniques of available public action in order to determine how we the people in the contemporary American world should implement strategies of effective governance. In this chapter, we explore some of these techniques, some viewed as types of regulation and others as alternatives to regulation. To be sure, not all of these strategies are necessarily implemented under the rubric of the police power (e.g., some economic incentives, tax policy under the constitutional taxing power). They are nonetheless relevant to our general inquiry, in that they illustrate the interface between traditional uses of the police power and alternatives that might accomplish the objectives of constitutional governance at least as effectively, if not more.

CLASSIC REGULATION

Models of regulation have developed largely around descriptions of market failures, aiming to get to the question of when government should intervene and for what purpose.¹ Debate rages over whether something should properly be labeled a market failure and, even if so, whether and to what extent regulation is the answer. It would seem from the ample literature that the debates over whether regulation is needed go through various waves. In the 1970s and 1980s, so-called public choice theory was a conspicuous part of the discussion of regulation.² Scholars steeped in neoclassical economics applied insights and evidence from the private sector, where regulation

in some form was long seen as an antidote for pathologies in business behavior and the market, to the public sector and to government agencies. Cleverly turning the subject of public interest regulation on its head, it brought to the table the subject of political failures, problems that would be expected to beset government's efforts to regulate in the public interest.³ Depending upon how hard the critique hit, the case for regulation was at least tempered and, in other instances, the brief against undertaking regulation in a particular area was made on the basis of the public choice critique.

Other theories of regulation have emerged over the same period of time, and scholars continue to look closely at both the theories that underlie the government's regulatory strategy, generally and in some targeted subject matters, and also evidence that could shed light on whether and in what circumstances regulation would work effectively. That these theories and critiques have had some meaningful impact upon public policy is illuminated by many episodes in past decades. One of the most notable was the erosion of airline price regulation in the late twentieth century, on the evidence mustered by Alfred Kahn and other critics of traditional forms of regulation.⁴ Theories which are ultimately skeptical about regulation have been met with theories that have pointed more optimistically to regulatory experiments that have yielded benefits, and of the scale and scope that government promised when these new programs were created. Perhaps two of the most notable success stories are, first, the regulations, here dating from the early years of the twentieth century, dealing with unsafe food. With the work of federal and state authorities, under the rubric of national, state, and even local level governments, we have significantly alleviated the problem of inadequate food safety and have saved lives and helped industry gain the confidence of a public historically skeptical of sustenance made available by anonymous businesses; and, second, the safety of air and train transport. Without minimizing notable accidents, especially with respect to commercial train travel in recent years, these two modes of transportation are remarkably safe and consistently so, due in great measure to the oversight work of the relevant federal agencies, working with state and local authorities, to ensure safety. In the last year, 835 million (unadjusted) passengers were carried on US airlines, and 658 million in 2021. And yet there has not been a fatal air crash on an American commercial airline since 2009.

The debate over how to regulate is, in an important sense, more meaningful as a practical matter than the debate about whether to regulate. After all, most segments of the economy, most scenarios that Americans encounter, both within and outside their homes, are subject to regulation in some form. A quick look around the house, any house, makes this clear. Given the ubiquity of regulation, the ship has largely sailed on the matter of whether some regulation in some form is necessary. Questions remain especially pertinent, however, concerning how we should go about regulating. Taking account of the kinds of situations that we deal with in connection with the police power, many of which have been discussed in the previous

chapter and elsewhere in this book, the usual mechanism of regulation is what has been labelled command-and-control.⁵ The most prosaic way to describe what goes on is to say that the government establishes a rule of conduct, one that is either prohibitory or mandatory (or some combination of both) and empowers the proper authorities to carry out the purpose of this regulation by identifying miscreants and imposing the appropriate penalties.

Vast swaths of regulation follow this model. We have discussed zoning at many junctures of this book, and zoning is a good example of the use of command-and-control regulation. So, too, are the plethora of health and safety regulations that we associate with federal and state agencies of different shapes and sizes. Indeed, this form of regulation is generally the most common technique available on the typical regulatory shelf. The paradigmatic example is the criminal law, of course, law which establishes a line between proper and improper conduct and establishes prohibitions that are enforced by the power of law and command obedience with mechanisms designed to assure that these commands are met. The signal advantage of this classic form of regulation is its certainty, its ease of implementation, as the subjects of regulation and the instruments of law enforcement both know (it is assumed) what behavior is allowed and what is prohibited. The signal disadvantage is its inflexibility. In this inflexibility, it eliminates any incentives to behave even better than the command instructs. This is a particular problem where there is ascending value to more conduct above the prohibition line, such as in the case of air or water pollution. Less pollution is better, but the command-and-control regulation gives no incentive to pollute any less than the minimally permissible amount.

Beyond command-and-control regulation, there are regulatory approaches that have greater flexibility and are occasionally used to enhance policy goals. Disclosure regulation is a common alternative to regulation by edicts that insists on a particular level of activity. The way in which states typically regulate campaign financing, California's Fair Political Practices Commission being a pioneer in this development, is usually through disclosure regulation. This is especially valuable, as in the campaign context, when command-and-control runs into potential constitutional objections.

Various incentive-based regulatory techniques have been advocated, in the environmental context and elsewhere.⁶ These include various forms of taxes, fees, subsidies, and myriad regulatory techniques that are distinct in that they are structured around incentives, rather than edicts. A more modern approach to the police power sees economic incentives as important components in an organic strategy to tackling wicked problems and in addressing obstacles to other modalities of regulation. We should be both ambitious in the use of such alternative mechanisms, but also cognizant of the limits of the standard economic models which undergird such approaches.

The critiques of incentive-based regulation are voluminous.⁷ Many stem from skepticism about the underlying economic model. But one of the earliest and valuable critiques came from well within the economic literature, and that was a paper

by economist Wallace Oates and his colleagues.⁸ Oates noted that many of the principal benefits associated with decentralized, incentive-based regulation could be gained from sensitivity at the command-and-control level to matters of efficiency and efficacy. In a nutshell, the problem is not with the nature of edicts and centralized commands – in our case, “centralized” might be at the state or even the local level – but with the approach that these ultimate decision-makers take to configuring the regulatory system.

The reality of the matter is that incentive-based regulation is still in its adolescence, as a well-studied mechanism for wicked problem-solving outside of the pollution context.⁹ We clearly need more attention paid to how such models of regulation – what are sometimes called “new governance” models – can help us solve some of the key problems described in Chapter 8, such as housing, infrastructure, etc. Moreover, it is not apparent how incentives-based models can be used to address so-called morals issues, recalling that the improvement of public morals remains one component part of what we see as an objective of the police power.

A somewhat close cousin to all these alternatives are performance-based regulations, ones that set a standard (so, in that sense is a “command”), but leaves discretion and flexibility to a regulated entity to develop whatever action steps will meet the standard (and so lacks the element of “control”).¹⁰ Finally, scholars, and especially Jon Hansen and Kyle Logue, have written about the strategic use of tort law, through the device of enterprise liability, to handle social problems that are not easily susceptible to various forms of *ex ante* regulation.¹¹

TAXING

The consideration of taxation as a device more effective than regulation at implementing public policy objectives begins with the difficult and enduring threshold question of whether and to what extent taxation is suited to this purpose. The most important scholarly contribution to the question of how taxes might be used to affect behavior, and not simply to raise revenue for the functioning of society, is that by British economist Arthur Cecil Pigou a century ago.¹² Pigou developed the idea of Pigouvian taxes, that is, taxes designed to reduce negative externalities.¹³ The objective of these taxes is to force consumers or businesses to internalize the costs of their activities through the use of tax policy as a pricing mechanism. In the Pigovian model, this strategy will be more effective than standard forms of regulation, principally because the setting of the tax (set to the marginal cost and marginal benefit of the activity) does not require the full body of information demanded by command-and-control regulation. Nor is this pricing mechanism subject to the same rent-seeking behavior of individuals competing over a menu of regulation.

Pigovian taxes, as explained in modern economic theory by William Baumol and refined in more contemporary work,¹⁴ will potentially function as an effective tool

of implementing good public policy. They will leverage the economic incentives of the economy's participants to reduce bad things and then to enhance public health, safety, and general welfare.¹⁵ To be sure, some of the value of Pigovian taxes rests on assumptions about economic conditions – for example, the assumption that the marginal costs individuals face are essentially equivalent across regulatory regimes¹⁶ – and also about the reliability of governmental institutions to make these decisions accurately through calibrated tax expenditures. Like other policymaking devices based upon mainstream economic theory, the practicability rests on the conditions in the real world, not on the chalkboard.

Some work in the modern law and economics tradition has broadened the claim about the role of Pivogian taxes to look at tax policy more generally. Kaplow and Shavell, for example, write that what they call “corrective taxes” can function as effectively as regulatory mandates.¹⁷ Even if they are just equally as good, the political costs of regulatory decision-making may tilt the scale in favor of sound tax policy as a means of furthering health and safety.¹⁸

Let us leave to one side the standard critique of neo-classical economics that underlies the consideration of taxes as a substitute for regulation. For this critique, whatever its shape and salience, may also be levied at regulatory decision-making in various configurations. Classic command-and-control regulation imagines that sensible use of penalties and punishment will affect behavior in an optimal way, and so the assumption of rationality is baked in these models in much the same way as with taxation as a means of affecting public policy. A different critique is that tax policy is less effective as a general governance strategy because it is hard to set the prices of activity where they need to be to reach an equilibrium, one in which safety and public health is safeguarded. The general welfare objectives of governance are also hard to realize when the option is imposing a tax on certain activities.¹⁹ Some businesses will be readily willing and able to absorb this tax; others will pass on this tax to consumers of the goods and services provided; and still others will absorb tax at even a high level in order to pursue certain objectives. Moreover, an interesting critique by David Weisbach and Jacob Nussim emphasizes that the basic economic conditions mean that it does not much matter whether the regulation is formed through taxation or through edicts or another scheme.²⁰ What matters is the institutional matrix within which these decisions are made. As they write:

If the underlying policy is held constant, there are no effects of putting a program into or taking a program out of the tax system even if doing so hurts or enhances traditional notions of tax policy. Welfare is the same regardless of whether the program is formally part of the tax system or is located somewhere else in the government.²¹

Ultimately, comparison is hard because we need more clarity on what we are aspiring to do through taxation or regulation.

We have been focusing on the capacity of traditional regulation and now also taxation, as a mechanism for furthering the ultimate goals embedded in the police

power, that is, to protect public health, safety, morals, and the general welfare. While we generally do not think of regulation as a means of wealth redistribution, we often think of taxation as fulfilling this purpose. This raises a question that we should at least touch on in this large discussion of the police power, even if the contours and implications of the debate lie beyond the scope of the book, and that is whether we might think of competing regulatory techniques as fulfilling an objective of redistributing wealth and redressing inequity and, further, how does this objective relate to the underlying purposes of the police power?²²

To begin with, we might view redistribution here as not a *per se* goal of the police power, but as a means of effectuating the more central goal of promoting public health and safety. We can stipulate that there is meaningful differential impact of certain behavior on poorer individuals. Certain strategies under the police power might well – let us say more forcefully should – account for these differences. For example, the government could develop public health strategies that are targeted toward the poor. Drawing from our recent Covid pandemic experience, consider mitigation rules that are focused on places in which more economically disadvantaged employees are housed (for example, the back part of restaurants, by contrast to customer areas or in factories where large numbers of blue-collar workers, possibly with areas of sub-standard ventilation, are engaged). Regulation in this setting might address public health issues concretely, and in doing so effectuate what is in essence a redistribution of economic goods from a comparatively wealthier employer to her less well-heeled employees.

We consider this strategy in the context of a discussion of taxation because one of the essential dilemmas is whether the goal of redressing wealth inequality that has tangible effects on public health (or safety) is best met through regulation tailored toward economic disadvantage or else through taxation. With the latter, we can impose generally applicable regulations – and thereby avoid claims that the lines drawn through regulation are arbitrary or otherwise unreasonable – but attend to economic disadvantage through the tax system. To be sure, the choice may not be an either/or one; we could tackle wealth inequality through regulation and also through taxation. However, an overall commitment to good governing under constitutional ideas should be conscious of which sorts of regulatory strategies are best designed to effectuate these goals. Insofar as wealth redistribution is a purposive outcome of tailored regulatory strategy, we should carefully consider whether relying on a system that in its design and structure, that is, the taxation system, is or is not truly the best way to accomplish these goals.

TAKINGS, REVISITED

At various junctures in this book, we have considered the legal doctrine of regulatory takings. This doctrine emerges out of a concern that a capacious approach to interpreting the police power might swallow up private property rights. Without

any demand for compensation, governments would favor regulations that pursued positive governmental ends at the expense of property owners, what are often the “little guy” in the controversy about regulation and its scope. Here let us broaden our inquiry to consider takings more generally.

Certainly the government can restrict through regulation the use of one’s private real estate. The protections we described in previous chapters are framed through the picture of private property as a social good and as an essential duty of government, meaning that property should be regulated in order to promote the general social good. This gives a picture that is incomplete, or maybe even distorted. Regulations which impact discrete individuals in their use and self-regulation of their property risk building up social capital and salutary accomplishments on the backs of individuals and therefore inequitably. Moreover, government action to pursue a social good rests on an assumption, largely uninterrogated thus far in this book’s discussion of the police power as a means of protecting the people’s welfare, that the government is acting in benign ways and is adequately internalizing the costs of its actions. The requirement that the government pay for a taking of private property, whether this taking happens through confiscation, unacceptable “physical invasion,” or value-reducing regulation, would help keep government under proper checks. It introduces what Calabresi and Melamed famously called a liability rule,²³ one that would establish a discernible cost for the government to impose restrictions on property. And insofar as the government is acting as a well-intentioned democratic agent of the people, these costs will be accounted for in our delegated public policy choices.

Scholars looking closely at the takings clause have not investigated in much depth the consideration, if any, the framers of this clause gave to how takings would supplement or complement the use of the police power. As Harry Scheiber reminds us, eminent domain was hardly used until well into the nineteenth century and at a time when government regulation of private property under the police power was already well established.²⁴ Coming to modern times, takings is a blunderbuss, a generally difficult mechanism for the government to accomplish policy goals. First, it is expensive, demanding after all just compensation to implement a particular strategy. Second, it is politically costly, as state governments have found in the two decades following the Court’s *Kelo* decision.²⁵ Many states have acted to restrict the scope of “public use” in order to limit the effective use of eminent domain.²⁶ Somewhat curiously, post-*Kelo* property rights advocates have spent much less capital in efforts to narrow the scope of “public purpose” in state constitutions or in other ways to limit through constitutional amendment or statutory design the use of the government’s police power to control the use of private property. Takings politics touches a third rail of democratic politics and even if we could imagine that carefully tailored use of eminent domain to improve public health, safety, and general welfare could well supplement the use of the police power for this same purpose, it is hard to see that the present state of politics and public opinion would countenance its use for such

ends. Whether or not this is an all-considered accurate rendering of the matter, the police power seems like a more domesticated version of government interference with private property and so bold efforts to limit it, in the same way that eminent domain has come to be limited by legislatures, the people directly, and courts, have been rather muted.

The structure and strictures of takings doctrine contribute to a failure in imagination and in creativity in regulating. Because it is an express constitutional power, it tempts lawmakers to address social problems associated with the use or misuse of private property by this one-size-fits-all technique of confiscation. Calabresi and Melamed usefully describe this method as creating a liability rule and, as such, moving the government to a more attractive strategy than if they were left only with a property rule, something that would track the police power controversy divide between an acceptable and an unacceptable deployment of official power to disturb the dominion of the property owner. But laying in the background of this view of the cathedral is the big question of whether the property-torts interface is the only or the best modality to look at this issue of social need and governmental strategy.

Here is another view – perhaps more of a snapshot – of the cathedral: We could imagine that the government's interest in prohibiting a certain use of private land, and in this prohibition reducing the economic value of that property by a meaningful (in the *Lucas* sense) amount, does not warrant the big step of changing owners. Because the government is hemmed in by regulatory takings doctrine, it has little choice in the matter. Moreover, the incentives for owners to implement the government's objectives (which, after all, might include, as in *Berman v. Parker*, destroying their own property to meet a common welfare requirement) are muddled. They might be willing to oblige the government's interest, but the incentives to hold out – which is, in essence, the very reason for having an eminent domain power at all – are too great. What if the government, instead of being required to transfer money from the public fisc to this private owner through just compensation could make the decision to restrict the owner's prerogatives through its general police power without a duty of compensation? However, and this is the key to all this, there would be a public fund made up for the express purpose of ameliorating the impact of government's intrusions on private property rights. This fund would be administered by public authorities – perhaps citizens deputized to carry out this role as a volunteer on behalf of the community. The availability of funds would soften the blow to property owners differently affected, but would neither oblige the government to pay the market value of the property nor always oblige the government to pay anything. The fund would be a mechanism for spreading losses. This is a view of the same cathedral that Calabresi and Melamed looked at in the explicit sense that this bears some analogy to how compensation schemes work, at least in a world where this social insurance scheme is not configured as a strict entitlement whose access is equivalent as exactly as possible to the loss suffered. Rather, it is a way of spreading the costs of losses, and avoiding litigation, in order

to create a practical mechanism to enable progress that comes from the private or public sector undertaking necessary actions while also accounting for the impact on liberty and property.

This somewhat half-baked idea undertakes to look at how regulation that is in a sense a mash-up of two distinct regulatory regimes – takings and the police power – might accomplish valuable social goals without the 100 years’ worth of problems that *Mahon* and its progeny have levelled on us.

NUDGES

One of the most prominent forms of alternative regulatory strategy is, at its heart, a sort of admixture of traditional economic thinking and behavioral psychology. Stemming from the pathbreaking work of Daniel Kahneman and Amos Tversky²⁷ and articulated elegantly in important work by Cass Sunstein and Richard Thaler, it is the use of so-called “nudges.”²⁸ Nudges involve informal methods derived from close attention to the decision environment (what they call the “choice architecture”) to get individuals to engage in beneficial ways without edicts or even economic incentives. Nudges are easy and cheap. According to Sunstein and Thaler, they can have, in some settings, equivalent effectiveness as traditional methods of regulation, but without the coercion and its attendant costs.

Many nudges are used to facilitate healthy human behavior, such as the inclusion of healthy food snacks at eye level in the grocery store and near the cash register. Setting default options for certain purchases, such as, for example, electric cars or other products that have social benefit, is an example of a valuable nudge. The gamification or creation of opportunities for simple competition in a setting where folks need encouragement to take important civic action, like voting, is a nudge used in various settings. Those involved in so-called design theory can assist – that is, nudge – certain behaviors through the layout of a store or any environment in which certain patterns of behavior are preferred. Ultimately, various nudges, used presently or still to be conjured up, trade on the insights of behavioral psychology and track what Kahneman and Tversky called System 1 thinking and also the use of heuristics.²⁹ Nudges are not dissembling, but they do take the opportunity for how individuals use mental shortcuts to reason and are deployed to change behavior and therefore change results. They are paternalistic, insofar as they assume that professional designers can improve on human decision-making by taking steps to influence – some might say manipulate – the choice architecture in order to produce certain outcomes. But it is libertarian in the fundamental sense that it does not decree action but, instead, creates conditions that ultimately redound to the benefit of individuals.³⁰

In the settings in which the police power would be applicable, it is not obvious how nudges would replace traditional or contemporary models of regulation. However, it is easier to see how they would complement regulatory strategies. Consider the

example of environmental protection at the local level. Creating defaults that would result in greater uses of safer, rather than less safe, appliances and other common instruments would help augment more interventionist strategies. Some of the regulation that aims to improve morals, for example the efforts to encourage better treatment of animals, could be augmented, or in some instances even supplanted, by nudges. Pictures of animals in distress is a homely example of a nudge and its use. More imaginative techniques might involve various commitment devices for, say, weight loss and also other important goals. Indeed, a company called *stickK* exists to help create and enforce “behavioral contracts” to help nudge individuals toward the realization of their goals.³¹

In comparing regulatory approaches, tax scholar Brian Galle sees advantages, interestingly enough, in both command and control regulation and in nudges.³² As to the former, he notes that “[s]ticks are, except in unusual circumstances, the more efficient tool for reining in the social overproduction of some negative-externality-laden good. Sticks earn the government money, while carrots drain the treasury, wasting hard-won tax revenues.”³³

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One of the key messages in this chapter’s discussion of regulation and regulatory alternatives is that the police power, precisely because it typically undergirds a significant public authority to compel action and to utilize the mechanisms of the criminal law and law enforcement to implement public goals, should be evaluated always to see if there are less draconian alternatives to command-and-control regulation. Some of the alternatives discussed above involve the continuing use of the police power or else governmental power that is at least as heavy-handed (as with the taxation power). Others are more gentle in that they seek to accomplish good policy ends with less interventionist means. It is impossible to generalize in any sensible way about whether one of these approaches is better than another. Not only are circumstances which call for some measure of governing different from one another, but in the usual run of cases it may be best for the government to use a combination of regulatory techniques, rather than something off the shelf. The old saying that “if one has a hammer, everything then looks like a nail” is apt here. In our commitment to good governing, we should be ever on the lookout for mechanisms and techniques that accomplish our ambitious goals with the best bang for our buck and the least intrusions on our freedoms and peace of mind.

RETURNING TO EXPERTISE AND DEMOCRACY

A challenge that we have raised at different junctures, sometimes more abstractly and other times in the context of particular examples, is how to balance the government’s reliance on expertise and expert decision-makers in undertaking its

regulatory strategies with our commitment to democracy and democratic choice. We learn much from a combination of our long, complex history as a republic, from theories from great minds of the past and present who have looked at the matters of decision-making in the policy arena, an arena made up of both politics and principle, and also at the practice of both expertise and democracy. Ultimately, the best choice is not either/or, but a calibrated yet evolving combination of democratic choice and reliance on evidence-based strategies that benefit from experts utilizing their expertise. An interesting conclusion that derives from the so-called Dunning–Kruger effect is pertinent here. This effect reveals that those with insufficient information (or, as the hypothesis often is framed, an overall lack of pertinent skills) tend to overestimate their skills and, as the saying goes, don't know what they don't know. Simultaneously, experts will often underestimate their knowledge and skill, a result perhaps of the laborious work of examining data and chasing down the vast amount of information and research that they would want in order to become truly confident in their analyses and conclusions.³⁴ To the extent that the Dunning–Kruger effect has real resonance, we should be cautious about pure democracy, given that those lesser skilled citizens will always outnumber others. Choices made through democratic decisions, even if we can introduce some meaningful elements of deliberation, can be problematic, and we should attuned to these problems and on guard against relying inordinately on such decision-making tactics. However, we should be cognizant of the holes and flaws in what experts would tell us – not so much because data and evidence cannot be trusted, but because the translation of facts about the real world by those entrusted with expertise over certain facts can be biased in various unconscious ways.

All of this is to say, as many have said before, that expert decision-making (frequently the *sine qua non* of bureaucracies and bureaucratic choice) and unmediated democracy are imperfect methods of making and implementing policy. We need to be vigilant about the flaws in both methods and think constructively about how to balance these modes of making policies and exercising power with one another and how best to capture the advantages of both modalities.

This enduring challenge is important to consider in the context of the police power, as we have described it here. In its origins, the police power was synonymous with the legislature's plenary power. We had a sense that our elected representatives would make the essential choices, both big and small, about how to regulate certain activities in order to promote health, safety, morals, and the general welfare. This system was by design a means of making decisions based upon the will of the people (democracy) and the best assessment of the situation and its needs (expertise, perhaps here in the Burkean sense of the term). Over time, however, we saw the police power being delegated to other authorities, including governors, local governments, administrative agencies, and other contraptions of governance. And so the exercise of this power was in the hands of an assembly of institutions, each speaking in the name of the government and thus on behalf of we the people. We

are unlikely, happily enough, to go back to a world in which the legislature makes all or even most of the policy decisions under the police power. Therefore, we must attend to these difficult, but not intractable, issues of democracy and bureaucracy, of government by both passion and reason, a combination that worried Madison and, later, Abraham Lincoln, but has become ingrained, if not inherent, in our multifaceted political process. Continuing attention to the evolving operation of the police power in modern and future America will give us a vantage point to see how these decision-making modes can be combined into a sufficiently mobilized whole that good governing becomes our entrenched approach to constitutional stability and successful constitutional performance.

NOTES

1. See generally Andrei Shleifer, "Understanding Regulation," 11 *Euro. Fin. Mgt.* 439 (2005).
2. See, e.g., Richard Posner, "Theories of Economic Regulation," 5 *Bell J. Econ. & Mgt. Sci.* 335 (1974).
3. See the various examples in Maxwell L. Stearns & Todd Zywicki, *Public Choice Concepts and Applications in Law* (2009).
4. See Thomas McGraw, *Prophets of Regulation* (1984).
5. For a good, comprehensive discussion of the concept, see Daniel H. Cole & Peter Z. Grossman, "When is Command-and-Control Efficient? Institutions, Technology, and the Comparative Efficiency of Alternative Regulatory Regimes for Environmental Protection," 1999 *Wisc. L. Rev.* 887 (1999).
6. See Bruce A. Ackerman & Richard B. Stewart, "Reforming Environmental Law," 37 *Stan. L. Rev.* 1333 (1985). See also Bruce Yandle, "Emerging Property Rights, Command-and-Control Regulation, and the Disinterest in Environmental Taxation." https://link.springer.com/chapter/10.1007/978-1-4615-1060-7_12.
7. See, e.g., Rena I. Steinzor, "Reinventing Environmental Regulation: The Dangerous Journey from Command to Self-Control," 22 *Harv. Env. L. Rev.* 103 (1998).
8. Wallace Oates, "The Net Benefit of Incentive-Based Regulation: A Case Study of Environmental Standard Setting," 79 *Amer. Econ. Rev.* 1233 (1989).
9. For an especially interesting exploration of incentive-based regulation in the context of regulating cigarettes, see Jon D. Hanson & Kyle D. Logue, "The Costs of Cigarettes: The Economic Case for Ex Post Incentive-Based Regulation," 107 *Yale L. J.* 1163 (1998).
10. See, e.g., Bruce A. Ackerman & William T. Hassler, *Clean Coal/Dirty Air* 121–28 (1981) (arguing for greater reliance on "ends-oriented" environmental regulation and less on "means-oriented" regulation); Office of the Vice President, *Improving Regulatory Systems: Accompanying Report of the National Performance Review* 24 (1993) ("Performance standards are generally preferable to prescriptive or design standards because they give the regulated industry the flexibility to determine the best technology to meet established standards.")
11. Jon D. Hanson & Kyle D. Logue, "The First-Party Insurance Externalities: An Economic Justification for Enterprise Liability," 76 *Cornell L. Rev.* 129 (1990).
12. See generally Arthur C. Pigou, *The Economics of Welfare* (4th ed., 1932).
13. On Pigouvian taxes, see Gregory Mankiw, "Smart Taxes: An Open Invitation to Join the Pigou Club," 35 *E. Econ. J.* 14 (2009).

14. See William J. Baumol, "On Taxation and the Control of Externalities," 62 *Am. Econ. Rev.* 307 (1972).
15. See Jonathan S. Masur & Eric A. Posner, "Toward a Pigouvian State," 164 *U. Penn. L. Rev.* 93 (2015).
16. An assumption vigorously critiqued in Victor Fleischer, "Curb Your Enthusiasm for Pigovian Taxes," 68 *Vand. L. Rev.* 1673 (2015).
17. Louis Kaplow & Steven Shavell, "On the Superiority of Corrective Taxes to Quantity Regulation," 4 *Am. L. & Econ. Rev.* 1, 7–10 (2002).
18. See, e.g., Lily Batchelder et al., "Efficiency and Tax Incentives: The Case for Refundable Tax Credits," 59 *Stan. L. Rev.* 23, 47–48 (2006) (discussing the benefit of uniform subsidies).
19. See Lee Fennell, "Willpower Taxes," 99 *Geo. L. J.* 1371 (2011).
20. David A. Weisbach & Jacob Nussim, "The Integration of Tax and Spending Programs," 113 *Yale L. J.* 955 (2004).
21. *Ibid.*, at 958.
22. For an interesting recent discussion of the connection between regulation and wealth redistribution, see Daniel Hemel, "Regulation and Redistribution with Lives in the Balance," 89 *U. Chi. L. Rev.* 649 (2022). See also David A. Weisbach, "Distributionally Weighted Cost-Benefit Analysis: Welfare Economics Meets Organizational Design," 7 *J. Legal Analysis* 151, 154–58 (2015).
23. Guido Calabresi & Douglas Melamed, "Property Rules, Liability Rules and Inalienability: One View of the Cathedral," 85 *Harv. L. R.* 1089 (1972).
24. N. Scheiber, "Public Rights and the Rule of Law in American Legal History," 72 *Cal. L. Rev.* 164 (1984).
25. See Ilya Somin, *The Grasping Hand: Kelo v. City of New London and the Limits of Eminent Domain* (2016).
26. See *ibid.*, at 107.
27. See, e.g., Amos Tversky & Daniel Kahneman, "Judgment under Uncertainty: Heuristics and Biases," 185 *Science* 1124 (1974).
28. See generally Cass Sunstein & Richard Thaler, *Nudge: Improving Decisions about Health, Wealth, and Happiness* (2008).
29. See Daniel Kahneman, *Thinking, Fast and Slow* 67 (2013).
30. See generally Russell Korobkin, "Libertarian Welfarism," 97 *Calif. L. Rev.* 1651 (2009); Jeffrey J. Rachlinski, "The Uncertain Psychological Case for Paternalism," 97 *NW. U. L. Rev.* 1165 (2003).
31. www.stickk.com/.
32. See Brian Galle, "Tax Command ... or Nudge? Evaluating the New Regulation," 92 *Tex. L. Rev.* 837 (2014).
33. *Ibid.*, at 851. See also Brian Galle, "The Tragedy of the Carrots: Economics and Politics in the Choice of Price Instruments," 64 *Stan. L. Rev.* 797 (2012).
34. On the Dunning–Kruger effect, see "Why Can We Not Perceive Our Own Abilities?" *The Decision Lab*. <https://thedecisionlab.com/biases/dunning-kruger-effect>.