

NO PERFECT SOLUTIONS FOR MARKET IMPERFECTIONS

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ABSTRACT

Markets are imperfect, and the suboptimal results are frequently used to justify government regulation. Government regulation, however, is also imperfect, and the suboptimal results are, less-frequently, used to justify deregulatory efforts. Located between those poles is industry self-regulation, in which the industry is tasked with effectuating regulatory goals. Unfortunately, but perhaps not surprisingly, industry self-regulation is also imperfect. Industry members, when called on to engage in self-regulation, will face what Austrian economists call ‘the knowledge problem,’ but at lesser severity than full government regulation. Industry members will also face a variety of public choice pressures, and those pressures may be more disruptive than under full government regulation. There are, therefore, no perfect solutions to market imperfections, and policy makers seeking solutions must weigh the relative tradeoffs on a case-specific basis, if they wish to obtain optimal outcomes.

INTRODUCTION

“[T]here are no solutions; there are only trade-offs.”¹

We live in an imperfect world. As a result, there will always be opportunities for improvement, large and small. The question is how best to make those improvements. For decades, the preferred method for large improvements has been to use the mechanism of government regulation. By one measure, total restrictive regulation in the United States has increased by 164% in the five decades between 1970 and 2020.² Some economic measures normally increase over time, particularly given positive rates of inflation, but a significant theory would be needed to justify an assumption

1. THOMAS SOWELL, *THE VISION OF THE ANOINTED: SELF-CONGRATULATION AS A BASIS FOR SOCIAL POLICY* 113 (1995).

2. The RegData database was utilized for starting and ending values. *RegData 4.0 Description and Downloadable Use Guide*, QUANTGOV (last visited Apr. 12, 2022), https://quantgov-documentation.s3.amazonaws.com/regdata_4_0_user_guide.pdf [<https://perma.cc/4RMR-JLHJ>].

that the need for corrective regulation has such a natural upward slope.

The world is certainly more complicated than in 1950, arguably by orders of magnitude, and that complexity may have introduced new levels of risk that would justify increased restrictive regulation. As an introductory matter, however, notice that the increased complexity is the result of dramatic technological innovations, and that many of those innovations have made the world much *safer*.³ Increased risk argues in favor of more regulation, but increased safety militates against demands for increased regulation, at least to the extent that restrictive regulation is aimed at creating a safer world.

The pro-regulation side of the debate also faces strong criticism from two lines of economic research. First, the knowledge problem, identified by Austrian economists like Hayek⁴ and Mises,⁵ which is the innate impossibility of government agents to collect, assimilate, and utilize sufficient knowledge to properly correct identified problems. The more complex the mechanism, the more difficult to predict any particular outcome, and there is no mechanism more complex than human society,⁶ with human emotions rendering impossible any reasonable precision in predicting the future. Regulators are tasked with developing rules that will govern the behavior of hundreds of millions of individuals—in effect, they are asked to predict the unpredictable.

Second, the public choice problem, which is the aggregation of various concepts from the public choice school of economics. In essence, these problems arise from the fact that regulators are human beings, complete with personal preferences that will affect policy decisions, even though regulators are supposed to be concerned only with the public interest.⁷ The effectiveness of government regulation will be impacted by phenomena like

3. For example, innovations that automate various parts of the manufacturing process—in any industry—make the process more complex but move individual workers away from the dangers of the assembly line.

4. E.g., F. A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519 (1945).

5. E.g., LUDWIG VON MISES, *SOCIALISM: AN ECONOMIC AND SOCIOLOGICAL ANALYSIS* 97-105 (1981).

6. E.g., F. A. HAYEK, *INDIVIDUALISM AND ECONOMIC ORDER* 72 (1980) (“The social complexes, the social wholes which the historian discusses, are never found ready given as are the persistent structures in the organic (animal or vegetable) world”).

7. E.g., Jeremy Knee, *Rational Electricity Regulation: Environmental Impacts and the “Public Interest”*, 113 W. VA. L. REV. 739, 740 (2011) (“Regulators of the electricity industry receive their authority from statutes saturated with notions of the ‘public interest’.”).

rent-seeking⁸ and regulatory capture,⁹ with resulting harms to market participants and society.

The following section will establish the standard justification for government intervention, followed by important caveats to that theory. Specifically, it will show how the knowledge problem and the public choice problem will reduce the effectiveness of government regulation, perhaps to zero. Section I will then circle back to the unregulated market and show how markets, although susceptible to certain imperfections, do not suffer from the knowledge problem or the public choice problem.

This kind of analysis is nothing new, and some scholars and industry leaders have suggested that industry self-regulation could address the imperfections of unregulated markets while providing marginal improvements over government regulation. Section II of this article will test that hypothesis against the knowledge problem and public choice problem. Involving industry participants marginally ameliorate the knowledge problem, enlisting the profit motive to incentivize self-regulators to utilize market signals when setting regulatory policy. Industry self-regulators will also have stronger incentives to remain nimble, allowing regulatory policy to change with market conditions. Unfortunately, self-regulation can also marginally worsen the public choice problem. If the industry is to regulate itself, it is far more likely to regulate in a way that will protect industry incumbents from existing and future competition.

As part of this analysis, it will be necessary to properly situate industry self-regulation between one extreme of full regulation, a centrally planned economy, and an unregulated market—whose imperfections lead individuals to seek government intervention. Between those extremes, there is a significant amount of territory. Every point on the spectrum need not be defined, but certain important signposts will be established, and examples of boundary conditions explored.

With a range of imperfect solutions available, the optimal solution may not be readily apparent or easily ascertainable. Section III confronts that reality, accepts it, and offers basic advice to guide what will inevitably be a flawed process, but can also be a productive endeavor if approached with caution, humility, and an eye towards the self-interest and adaptability of human beings.

8. David R. Henderson, *Rent Seeking*, in THE CONCISE ENCYCLOPEDIA OF ECONOMICS 73-75 (David R. Henderson ed. 2008).

9. George J. Stigler, *The Theory of Economic Regulation*, in 2 BELL J. ECON. & MGMT. SCI. 3 (1971).

I. WHETHER AND WHITHER TO REGULATE?

The demand for government regulation is understandable in an imperfect world. Hobbes famously referred to the state of nature as “solitary, poor, nasty, brutish, and short,”¹⁰ and posited that individuals seek government as a way of preserving life within that world. This view is pervasive in society,¹¹ and it is certainly true that the world is, and has always been, one with significant risks. As technological innovations mitigate or eliminate some risks, other risks are exacerbated, and entirely new risks emerge.

Risks exist because we cannot control the actions of other people and because we cannot control the consequences of our own actions. In the first category are such well-known concepts as externalities and commons problems, arising when private incentives do not align with public welfare. As an introductory matter, this desire to better align incentives can be overstated because, as Adam Smith so memorably stated, the “invisible hand” of the market order often aligns the private incentives with those of others.¹²

The second category is filled with all the ways in which our choices end badly for us. Generally, we take actions where we anticipate that the benefits will outweigh the costs.¹³ Sometimes, we are mistaken about the magnitude of either benefits or costs. The individual will not typically request external constraints *ex ante*; when predicted risk is high enough, the individual will voluntarily refrain from the behavior. In the long run, however, regulation is still likely. The individual for whom the risk became reality may insist upon societal remediation or others may paternalistically decide that the individual is incapable of adequately calculating the risk.

The case for regulation, though not unfounded, is often overstated. The reason for this is two-fold. First, regulatory advocates overestimate the ability of government intervention to make the situation better and

10. THOMAS HOBBS, *LEVIATHAN* 57 (1967).

11. *E.g.*, THE DECLARATION OF INDEPENDENCE para. 2 (U.S. 1776) (“We hold these truths to be self-evident, . . . that to secure these [inalienable] rights, Governments are instituted among men.”).

12. ADAM SMITH, *AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS* 21-22 (R. H. Campbell & A. S. Skinner, eds., Liberty Fund 1981) (1776) (“[M]an has almost constant occasion for the help of his brethren, and it is in vain for him to expect it from their benevolence only. He will be more likely to prevail if he can interest their self-love in his favour, and shew them that it is for their own advantage to do for him what he requires of them. . . . It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest.”).

13. Knee, *supra* note 7, at 788.

underestimate the cost of the regulatory process. Government regulators are all but guaranteed to arrive at the wrong regulatory conclusion, given the quantity of information and knowledge necessary to make the kind of decisions that regulators must make. The conclusion need not be wrong by a substantial margin, but it will be wrong, given that aggregation on the scale necessary for most government regulation is impossible through any mechanism of conscious design. Likewise, even if the socially optimal outcome were achievable, public choice concerns like regulatory capture, rent seeking, and resulting barriers to entry mean that regulators are far more likely to choose outcomes that benefit well-connected industry incumbents.

Second, regulatory advocates underestimate the power of existing market incentives to ameliorate the perceived problems. It is understandable that politicians, regulators, and activists of many stripes will be loath to “do nothing,” given that their continuing in their jobs requires being seen to do something. Markets, however, are never truly unregulated, and several forces will, at least in part, counter the problems identified by market critics.

A. The (Qualified) Case for Regulation

Proponents of government regulation span a wide range in their views on markets. Some believe markets are, by their nature, destructive and exploitative.¹⁴ This is the foundation of much Marxist thought, and it views market mechanisms as per se bad. Other proponents of regulation see markets as useful but flawed tools for achieving the goal of human flourishing.¹⁵ For this group, government regulation is necessary to make sure that markets’ inherent failings don’t overwhelm the good that can come from using market forces to seek the welfare of individuals and society. A final group that advocates for government regulation is made up of those who believe that markets are not only useful but also that markets, generally, work well. To this group, government regulation would be harmful if broadly applied, but can be useful in specific circumstances, because “[insert area of concern] is different.”

In each of these groups, markets are viewed with skepticism, although the scope of that skepticism necessarily varies. There is an extensive literature arising from that skepticism, focusing on apparent failures of

14. See e.g., MATTHEW DESMOND, EVICTED: POVERTY AND PROFIT IN THE AMERICAN CITY (2016); See also POVERTY, BY AMERICA 41 (2023) (describing markets where workers are exploited and undercut).

15. See e.g., House Comm. On Interstate and Foreign Com., H.R. Doc. No. 73-1383, at 5 (1934) (declaring the need for legal intervention to promote investor confidence in financial markets).

markets to achieve optimal outcomes.¹⁶ Some of the more common “market failures” are externalities, public goods, commons, and information asymmetries, though there are multiple variations on each general category.

1. Externalities

Externalities are used to justify regulation because, according to theory, either too much or too little of a good or service will be produced, depending on whether the externality is positive (too little will be produced) or negative (too much).¹⁷ Market transactions are efficient when the parties to the transaction bear all of the costs and capture all of the benefits, and externalities exist when those conditions fail. With negative externalities, the imposition of costs on third parties not only yields suboptimal outcomes for society, but also for the third party who gains nothing from the transaction but must bear some of the cost.¹⁸

In the context of externalities, arguments for regulation will therefore invoke both the third-party victim and society, at large.¹⁹ And, while economic theory tells us that regulation, in theory, can yield a more efficient outcome, economic theory also cautions that the story is not that simple. For example, establishing with certainty the likely existence of spillover costs and benefits is not a trivial matter, and even that task is simple compared to establishing the magnitude of the spillovers.²⁰

More foundational, however, is the critique of standard regulatory arguments offered by Ronald Coase, in *The Problem of Social Cost*.²¹ There, Coase pointed out that economic analyses of what he referred to as “reciprocal”²² harms almost always presume, rather than prove, the existence

16. See e.g., Mollie Lee, *Environmental Economics: A Market Failure Approach to the Commerce Clause*, 116 YALE L.J. 456 (2006) (describing a market failure approach leading to the use of statutes to correct market failures).

17. Bryan Caplan, *Externalities*, LIBR. ECON. & LIBERTY, <http://www.econlib.org/library/Enc/Externalities.html> [<https://perma.cc/37TG-ELXN>].

18. Chunlin Leonhard, *Negative Externalities and Subprime Auto Financing: Time to Let the Hanging Paragraph Go*, 45 U. TOL. L. REV. 267, 270 (2014).

19. *Id.*

20. Arthur C. Pigou, *State Action and Laissez-Faire*, in *ECONOMICS IN PRACTICE: SIX LECTURES ON CURRENT ISSUES* 107 (1935) (“In order to decide whether or not State action is practically desirable, it is not enough to know that a form and degree of it can be conceived, which, if carried through effectively, would benefit the community. We have further to inquire how far, in the particular country in which we are interested, and the particular time that concerns us, the government is qualified to select the right form and degree of State action and to carry it through effectively.”).

21. R.H. Coase, *The Problem of Social Cost*, 3 J. L. & ECON. 1 (1960).

22. *Id.* at 838.

of a victim. Instead, Coase argued, what economists call externalities are nothing more than competing interests, demanding analysis, rather than summary conclusions about who is to blame. Rather than being a justification for regulation, these reciprocal harms can be resolved through bargaining—when transaction costs²³ are low—or through tort law. Coase’s formulation does allow for the possibility of government intervention, but only when transaction costs are high, and only after neutral analysis of all claims.²⁴

Tort law deserves additional consideration when addressing the role of government regulation in curbing externalities. The purpose of our tort regime is to correct wrongs imposed on others, making the tort victim whole.²⁵ While not every case of reciprocal harms will be resolvable in tort law, and not every tort arises from reciprocal harms,²⁶ the existence of a functioning system of tort law reduces the need for government regulation. Proponents of government regulation should—but rarely do—explain why the problem that regulation would purportedly solve cannot be remediated under tort law.²⁷ Furthermore, to the extent that existing tort doctrines do not provide a remedy, some consideration should be given for whether the appropriate solution is more government regulation or, instead, modifications to tort law.²⁸

23. The theory of transactions costs can cause a lot of consternation. For a simplified explanation, see Jeremy Kidd, *Kindergarten Coase*, 17 GREEN BAG 2D 141, 144-45 (2014).

24. One underappreciated Coaseian argument is that, on occasion, the conflict arising from reciprocal harms often has its genesis in prior government action. Coase, *supra* note 21, at 863. A neutral analysis of claims might therefore allow resolution of the claims simply by reversing the prior action.

25. Jules L. Coleman, *Tort Law and the Demands of Corrective Justice*, 67 IND. L.J. 349, 361-62 (1992).

26. It would be difficult, for instance, to frame many intentional torts—assault, for example—as a form of reciprocal harm. The intentionally-swung fist and the recipient’s nose are not morally equal in their claim to that space.

27. Instead, regulatory proponents rely on broad claims about tort law being “inappropriate” for whatever area of society the proponent wishes to regulate. *E.g.*, May L. Lyndon, *Tort Law and Technology*, 12 YALE J. ON REGUL. 137, 137 (1995) (highlighting the inappropriateness of tort law for responding to risks posed by emerging technologies). Within academia, there are scholars who engage with the strengths and weaknesses of tort law and regulation, *id.* at 138 n.1 (collecting sources), but the broader debate largely ignores that literature.

28. *But see* E. Donald Elliott, *Goal analysis Versus Institutional Analysis of Toxic Compensation Systems*, 73 GEO. L.J. 1357, 1357 (1985) (“Rather than debating about how to modify traditional tort law doctrines to accommodate toxic tort cases, we should be focusing on the problems of toxics in the environment from the standpoint of the legal system as a whole.”).

2. The Not-So-Tragic Commons

Another scenario in which markets are presumed to fail is in the presence of a common pool resource. Originally referred to as “The Tragedy of the Commons” by Thomas Hardin,²⁹ commons problems arise when there is a resource that is open to everyone but has a finite rate of regeneration.³⁰ According to economic theory, the common resource will be inexorably depleted. Everyone will know that there are more users than is feasible, given the limited capacity of the resource. This, in turn, will lead everyone to consume as much as possible, before the inevitable depletion of the resource.³¹ The nature of the resource, therefore, creates such strong assumptions about the inevitability of depletion that users make it happen, in a tragic self-fulfilling prophecy. If the resource is valuable in more than the short run, protection and management are valuable, but only government intervention and regulation can halt the degradation and preserve value.³²

The story of the tragedy of the commons is well known to advocates of government regulation. Sadly, those same advocates rarely seem to be as familiar with the work of Nobel Laureate Elinor Ostrom, who showed that, under certain circumstances, the commons problem is solved without government intervention.³³ Essentially, if there is value to be preserved, individuals will often recognize it on their own and take steps to preserve it, without needing the coercive power of government. This event occurs when there is no individual profit to be obtained.

Ostrom’s work does not necessarily negate the argument for government regulation in areas where common pool resources are present. It does, however, caution against accepting any blanket assertion that a commons *needs* government regulation. Government regulation can be helpful in resolving a common pool resource problem, but there are other potential solutions.³⁴

29. Garrett Hardin, *The Tragedy of the Commons*, 162 SCI. 1243 (1968).

30. In economic terms, being open to everyone means that the resource is not excludable, and having a finite rate of regeneration means that the resource is rival, that use of the resource by one person negatively impacts the ability of others to use the resource.

31. Garrett Hardin, *Tragedy of the Commons*, in THE CONCISE ENCYCLOPEDIA OF ECONOMICS (David R. Henderson, ed. 2008)

32. Amy Sinden, *The Tragedy of the Commons and the Myth of a Private Solution*, 78 U. COLO. L. REV. 533 (2007).

33. ELINOR OSTROM, GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION (1990).

34. *Id.* See also ROBERT ELLICKSON, ORDER WITHOUT LAW (1991) (disclosing historical examples of emergent solutions to commons problems in the American west).

3. Information Asymmetries

A third, standard explanation for why market transactions might benefit from government regulation is the inequality of information between counterparties.³⁵ Our confidence that voluntary transactions are value-enhancing is significantly reduced when one or both parties do not have access to important information.³⁶ When party A has exclusive access to information pertinent to party B's decision, government regulations can force party A to disclose, improving the efficiency of any agreement that arises between the parties.

Notice, however, that not all information disparities are harmful and in need of remediation. For one thing, many information disparities are voluntary, in that both parties have access to the same information, but one party chooses not to aggregate the information. Although completely misunderstood by some scholars,³⁷ the point is straightforward. In a world where immense amounts of information—about ourselves, about our friends and family, about our politics, about our consumer choices, about the natural world, etc.—are at our fingertips, it is simply not possible to process even a fraction of it. We process the information that yields the greatest marginal benefit.

The fact that Party A has aggregated information into a useful form is not only *not* harmful to Party B but provides a strong motivation for Party B to *not* duplicate Party A's efforts. Aggregation of information is costly, and duplication of the effort would be wasteful, so any disparity of information between Party A and Party B is the result of valuable specialization that generates value from the transaction.³⁸ While some regulatory regimes are

35. See e.g., Robert F. Rich & Julian Ziegler, *Genetic Discrimination in Health Insurance – Comprehensive Legal Solutions for a (not so) Special Problem?*, 2 IND. HEALTH L. REV. 5, 22 (2005) (“The only means to protect the socially important individual health insurance market from the effects of adverse selection (for example market failure) is to prevent the onset of asymmetric information by granting insurers equal access to genetic information.”).

36. C.f., David Gilo & Ariel Porat, *Viewing Unconscionability Through a Market Lens*, 55 WM. & MARY L. REV. 133, 146 (2010) (“Absent information gaps in which consumers lack sufficient information, all terms in standard-form contracts should be deemed welfare-enhancing and therefore efficient.”).

37. See e.g., Ryan Calo & Alex Rosenblat, *The Taking Economy: Uber, Information, and Power*, 117 COLUM. L. REV. 1623, 1649 (2017) (“Missing from the literature [of information disparity transactions], however, is a fundamental critique of the sharing economy grounded in asymmetries of information and power.”). For an explanation of why this understanding of information asymmetries is unsound, see Jeremy Kidd, *Who's Afraid of Uber?*, 20 NEV. L.J. 581, 637-39 (2020).

38. See generally, Smith, *supra* note 12, at 17-21 (describing the sources and benefits of specialization).

aimed at equalization of information,³⁹ success in the endeavor would eliminate the value from exchange.

Another potential complication with efforts to regulate based on the purported market failure of “information asymmetries” is that collection and disclosure of information, in addition to reducing the value of exchange, has costs – sometimes very high ones.⁴⁰ Parties to a transaction are always free to demand whatever information they find relevant to their calculating the net value of the proposed transaction. At best, regulation around information could provide value by identifying areas where valuable information might exist, as doing so would signal to the counterparties that they should inquire into those areas.

4. Black Swans and High-Risk Creatures

Finally, government intervention might also be helpful in reducing the likelihood of certain high impact, unpredictable events.⁴¹ The fact that they are unpredictable limits the ability of individuals or businesses to take steps to avoid the negative consequences. It also limits the ability of ex post legal remedies (tort law and criminal law) to deter the behavior that could lead to them.⁴² The fact that they are high impact means that standard modes of

39. For example, the Securities and Exchange Commission has, for years, attempted to enforce Rule 10b-5 against insider trading based on a principle that all traders should have equal access to all information. *Securities and Exchange Commission v. Texas Gulf Sulfur*, 401 F.2d 833, 848 (1968) (accepting the SEC argument that Rule 10b-5 “is based in policy on the justifiable expectation of the securities marketplace that all investors trading on impersonal exchanges have relatively equal access to material information”). Though the U.S. Supreme Court rejected the equal access theory in *Chiarella v. U.S.*, 445 U.S. 222 (1980), in favor of the misappropriation theory, *id.* at 232-34, the SEC continues to use equal access as a justification for prosecution of insider traders, e.g., Press Release, U.S. Securities and Exchange Commission, *Former Equifax Manager Charged with Insider Trading* (June 18, 2018), <https://www.sec.gov/news/press-release/2018-115> [<https://perma.cc/UZG6-M79V>].

40. E.g., Martin H. Dozier, *Barings’s Ghost: Item 305 in SEC Regulation S-K and “Market Risk” Disclosures of Financial Derivatives*, 34 GA. L. REV. 1417, 1421 (2000) (“The SEC should reevaluate Item 305 because Item 305 requirements confuse investors by requiring disclosure of large quantities of immaterial information, produce costs exceeding the benefits of disclosure, reveal sensitive investment information to competitors, and stifle innovation and strategic risk-taking by management.”).

41. One type of event that might fall into this category is the Black Swan event. E.g., NASSIM NICHOLAS TALEB, *THE BLACK SWAN* xxi-xxii (2010). An event need not reach the level of severity or unpredictability of Taleb’s Black Swan, however, to be amenable to regulation.

42. Unlike unpredictable remedies for known harms—such as unlimited noneconomic or punitive damages—which provide overdeterrence for potentially beneficial activities, *see*

compensation are unlikely to make the victim whole.⁴³ When both characteristics are present, *ex ante* intervention may be the only way to minimize or avoid the harms inflicted by these events. If one or both characteristics do not manifest, or do so only weakly, a deterrence and *ex post* remediation of harms may be possible, but there may still be sufficient related risk to justify regulation. Government regulation may be able to provide, *ex ante*, a reduction of risk that *ex post* remedies cannot. At its most extreme, regulation will prohibit the behaviors that may lead to these events.

The difficulty with this justification for government regulation is that its apparent utility in the pro-regulation argument makes it almost irresistible to pro-regulation advocates. When a category becomes a *per se* justification for regulation, that category rapidly expands to include more and more things. This trend is a product of the natural human desire for the easy path to the desired outcome. If that which is an ultra-high risk event requires *ex ante* regulation, then whatever we desire to regulate must surely be an ultra-high risk event, because that will make our desired policy outcome a foregone conclusion.

This phenomenon is not unique to this situation; any legitimate concern that turns out to be emotionally attractive to the electorate will be stretched far beyond its reasonable bounds to achieve ancillary, or even unrelated, goals. Consider how, in the wake of the 9/11 attacks on the United States, far more foreign policy debates—and even some seemingly-unrelated debates—became tied up in the “War on Terror,”⁴⁴ or how nearly every reform of financial markets in the wake of the Great Recession of 2007-08

Thomas F. Cotter, *Damages for Noneconomic Harm in Intellectual Property Law*, 72 HASTINGS L.J. 1055, 1106 (2021) (“[O]ptimal deterrence theory falters if awards are so unpredictable or inconsistent that they induce potential tortfeasors to take excessive precautions.”). The inability of individuals to anticipate their actions’ resulting in Black Swans eliminates the ability to take proactive measures to prevent them.

43. For example, compensation for wrongful death is awarded to family members who have lost a loved one to negligent behavior by another, but it can hardly be said that the money makes the victim whole. Going one step further, a Black Swan event that leads to mass death would not only multiply that problem by the number of people dead, but could also potentially bankrupt the wrongful entity, leading to even monetary damages being unavailable.

44. One estimate puts the number of displaced individuals from activities tied to the War on Terror at 37 million, in countries as far flung as Libya, Somalia, Syria, Pakistan, and the Philippines. See David Vine, et al., *Creating Refugees: Displacement Caused by the United States’ Post-9-11 Wars* (Aug. 19, 2021), https://watson.brown.edu/costsofwar/files/cow/imce/papers/2021/Costs%20of%20War_Vine%20et%20al_Displacement%20Update%20August%202021.pdf [<https://perma.cc/PKS3-4XE8>]. Some critics claim that War on Terror tools, like the Patriot Act, have been used to silence domestic political opponents. See Ryan Singel, *FBI Tried to Cover Patriot Act Abuses with Flawed, Retroactive Subpoenas, Audit Finds*, WIRED.COM (Mar. 13, 2008), <https://www.wired.com/2008/03/fbi-tried-to-co/> [<https://perma.cc/EMA6-MLM3>].

became necessary to combat “systemic risk.”⁴⁵ Similar patterns can be seen with climate change⁴⁶ and systemic racism,⁴⁷ as well. This overuse can cause a backlash, making it more difficult to combat climate change, fight legitimate racism, or reduce the likelihood of real ultra-high-risk events. Pro-regulation advocates must therefore be cautious with their favorite toy, lest they break it and lose it forever.

For each of the foregoing categories, economic theory provides both the basis for advocates’ arguing in favor of government regulation of certain behaviors, but also strong caveats about the strength of those arguments. To be clear, the claim is not that markets are perfect, but that advocates for intervention often overstate the strength of their arguments. The rationale for government regulation is weakened further by the difficulty of even the best-intentioned government regulators to do the job they are assigned, as well as the perverse incentives that cast doubt on their ability to approach their job in a neutral fashion.

B. Wait a Minute, Part I: The Knowledge Problem

Government regulation offers to intervene to fix problems that arise in the normal functioning of the market. In a very real sense, that is a promise that simply cannot be kept, even if the promisor has all the best intentions. The reason is that the promisor cannot know enough to comprehend, much less fix, all the complexities of the market. The famous essay, *I, Pencil*, illustrates how it is impossible for any individual to assimilate all the information necessary to plan for the production of a simple product—the pencil.⁴⁸ And not a late-20th Century mechanical pencil, but the basic, straightforward, graphite-and-wood form of the ages-old writing instrument. It is only through the miracle of prices that markets provide the correct signals to millions of individuals, in a vast array of industries, that allows a pencil to be produced.

Other critiques go even further, pointing out that it is not just a question

45. Professor Bainbridge has documented many legislative proposals that passed in the wake of the Great Recession, and how few of them had anything to do with the causes of that economic downturn. See Stephen M. Bainbridge, *Dodd-Frank: Quack Federal Corporate Governance Round II*, 95 MINN. L. REV. 1779 (2011).

46. E.g., Kaia Hubbard, *Global Warming Risks Increase in Conflicts*, U.S. NEWS (Oct. 29, 2021), <https://www.usnews.com/news/best-countries/articles/2021-10-29/how-climate-change-may-increase-global-conflicts> [<https://perma.cc/YPU6-9G9H>].

47. E.g., Gary Younge, *What Covid Taught Us About Racism and What We Need to Know*, GUARDIAN (Dec. 16, 2021), <https://www.theguardian.com/society/2021/dec/16/systemic-racism-covid-gary-younge> [<https://perma.cc/L3C6-GCF9>].

48. LEONARD READ, *I, PENCIL* (1958).

imperfection. Post regulation, the optimum path will have changed, and the original adaptation may no longer be optimal. It is possible, however, that the original adaptation would have been more effective and less costly.

Adaptation is a concern parallel to, but separate from, the knowledge problem, but it operates in the same direction—advising caution in choosing a regulatory path. The potential for adaptation should not paralyze us into complete indecision regarding the proper response to market imperfections, but it should lead us to a greater sense of humility about humanity’s ability to plan solutions to complex orders.

CONCLUSION

There are simply no perfect solutions when it comes to market imperfections. The dominant choice for “fixing” markets is government regulation, but it is an imperfect solution, at best, given its susceptibility to the knowledge problem and the public choice problem. Regulators simply cannot know enough to diagnose or remedy the problem, even in a static world. That the world is dynamic, not static, makes government regulation even more problematic. Unfortunately, all available alternatives—primarily collaborative self-regulation and cooperative self-regulation—offer mixed results when judged by the same criteria. Industry participants are less subject to the knowledge problem, as they are part of the market and, therefore, privy to market signals. Industry participants are also less constrained in their ability to react to those signals, so they are better able to keep pace in a dynamic environment. Unfortunately, the factors that alleviate the knowledge problem exacerbate the public choice problem, as industry members are both prone to seek barriers to competition and, when empowered by government or internal cooperation, well positioned to do so when engaged in self-regulation.

Because of these realities, any regulatory solution is likely to not only be wrong, but to lead to strong barriers to entry that will curb competition and innovation. Consumers and broad societal interests—usually the justification for regulation—are harmed as well as aided, and it is impossible to know whether the net effect is positive or negative.

That returns us to the markets whose imperfections led to demands for regulation, in the first place. Those imperfections are real and may not be entirely countered by consumer regulation. Consumer regulation is far more robust than is commonly understood, as well as being less subject to the knowledge problem and immune to the public choice problem. Nevertheless, markets continue to experience imperfections, and those imperfections impose costs on society. Deciding whether to intervene and, if so, how, is

not a search for a perfect solution, but a choice between imperfect options. The decision is one that deserves far more deliberate care and humility than is traditionally exhibited in our rush to regulate.