
Article

The Trouble with Counting: Cutting Through the Rhetoric of Red Tape Cutting

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“You know that I am called the Count
Because I really love to count
I could sit and count all day
Sometimes I get carried away
I count slowly, slowly, slowly getting faster
Once I’ve started counting it’s really hard to stop
Faster, faster. It is so exciting!
I could count forever, count until I drop.”

– Sesame Street - The Count’s Counting Song Lyrics | Metro
Lyrics

INTRODUCTION

On January 30, 2017, President Donald J. Trump signed Executive Order (EO) 13,771, “Reducing Regulation and Controlling Regulatory Costs.” To promote deregulatory goals, EO 13,771 requires administrative agencies to repeal two regulations for every one they propose or issue, leading many to refer to it as the “2-for-1”¹ Order. The Office of Management and Budget (OMB) has published detailed guidance instructing agencies how to implement this Executive Order, which constrains their ability to promulgate new regulations under their

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1. This Article will use either 2-for-1, the Order, or EO 13,771 to refer to Executive Order 13,771 that President Trump signed on January 30, 2017 requiring regulation counting.

statutory mandates.² While many commentators have derided EO 13,771 as silly and irrational,³ it would be a mistake to dismiss 2-for-1 as a one-off political stunt. In fact, the idea motivating the Order emerges from a larger intellectual project arguing that economic growth is being hampered by the “sheer quantity of regulation[s].”⁴ In a string of studies,⁵ researchers have attempted to establish this relationship by counting regulations

2. OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, OMB MEMO. NO. M-17-21, GUIDANCE IMPLEMENTING EXECUTIVE ORDER 13,771, TITLED “REDUCING REGULATION AND CONTROLLING REGULATORY COSTS” (2017) [hereinafter OMB GUIDANCE] (explaining policy regarding repealing two existing regulations whenever an agency promulgates one new regulation).

3. See, e.g., Caroline Cecot & Michael Livermore, *The One-In, Two-Out Executive Order Is a Zero*, 166 U. PA. L. REV. ONLINE 1, 11 (2017) (questioning the rationality of the Order’s methodology for deregulating in light of the OMB’s stringent counting requirements, which could slow deregulatory initiatives, and the fact that “[i]f agencies issue no regulations, then the Order’s requirements to repeal at least two existing regulations would not get triggered at all”); Susan Dudley, *Putting a Cap on Regulation*, 42 ADMIN. & REG. L. NEWS 4, 5 (2017) [hereinafter *Capping Regulation*] (suggesting that it would be irrational not to consider net benefits to “distinguish a good rule from a bad rule”); Nicholas Ashford, *Trump Rejects Science, Technology, Economics, and the Constitution With His Two-for-One Executive Order*, HUFFPOST: BLOG (Feb. 1, 2017, 12:35 PM), http://www.huffingtonpost.com/nicholas-ashford/trump-rejects-science-tec_b_14552756.html (describing “the folly of abandoning regulation as a means of stimulating technology and employment”); Michael C. Dorf, *Trump’s Cut-Regulations Order Is Plain Stupid*, NEWSWEEK (Feb. 5, 2017), <http://www.newsweek.com/michael-dorf-trumps-cut-regulations-order-plain-stupid-551293> (pointing out the illogical elements and the means of evading the Order); Dan Farber, *Trump’s 2-for-1 Order: Legal Issues*, LEGALPLANET (Feb. 6, 2017), <http://legal-planet.org/2017/02/06/trumps-2-for-1-order-legal-issues> (explaining five different administrative law issues arising under the Order); Dan Farber, *Trump’s Anti-Regulation Executive Order*, LEGALPLANET (Jan. 30, 2017), <http://legal-planet.org/2017/01/30/trumps-anti-regulation-executive-order> (“What it *will* do is cause chaos and uncertainty.”); Sally Katzen, *Cutting Federal Regulations? Let’s Be Smart About It*, THE HILL: CONGRESS BLOG (Dec. 12, 2016, 12:55 PM), <http://thehill.com/blogs/congress-blog/economy-budget/309941-cutting-federal-regulations-lets-be-smart-about-it> (pointing out that a two-for-one requirement could affect uncontroversial regulations that “enable the government to function and Americans to go about their lives”).

4. See Omar Al-Ubaydli & Patrick A. McLaughlin, *RegData: A Numerical Database on Industry-Specific Regulations for All United States Industries and Federal Regulations, 1997–2012*, 11 REG. & GOVERNANCE 109, 110 (2017) [hereinafter *RegData*]; see also *infra* note 7.

5. CLYDE WAYNE CREWS, JR., COMPETITIVE ENTER. INST., TEN THOUSAND COMMANDMENTS: AN ANNUAL SNAPSHOT OF THE FEDERAL REGULATORY STATE (2017), <https://cei.org/sites/default/files/Ten%20Thousand%20Commandments%202017.pdf> [hereinafter TEN THOUSAND COMMANDMENTS] (providing an overview of President Trump’s executive actions and arguing for the need for a transparent regulatory state); *RegData*, *supra* note 4, at 109–10; Brent Coffey, Patrick A. McLaughlin & Robert D. Tollison, *Regulators and Redskins*, 153 PUB.

and correlating these counts to various macroeconomic outcomes of interest, like U.S. employment, productivity, and competitiveness.

This intellectual project appears to have two principal aims. The first is political. Regulation counting studies radically simplify complex regulatory phenomena to make criticisms of regulation salient to lawmakers and the general public and to bolster political support for deregulatory policies. The second is empirical and, ultimately, legal. By producing scholarly literature documenting a correlation between the number of regulations and negative economic outcomes, anti-regulatory scholars and advocates generate a body of empirical research that agencies and courts can rely on in implementing and upholding the legality of deregulatory counting policies like 2-for-1.⁶

The roll-out and marketing of EO 13,771 plainly demonstrate the political value of counting studies. President Trump and his supporters have repeatedly blamed the number of federal regulations for negative economic outcomes and claimed that they must reduce the number of regulations to spur beneficial economic outcomes. On the campaign trail, President Trump

CHOICE 191, 202 (2012) [hereinafter *Regulators and Redskins*]; John W. Dawson & John J. Seater, *Federal Regulation and Aggregate Economic Growth*, 18 J. ECON. GROWTH 137, 137 (2013) (describing the relationship between regulation and macroeconomic indicators and variables); Peter L. Strauss, *Publication Rules in the Rulemaking Spectrum: Assuring Proper Respect for an Essential Element*, 53 ADMIN. L. REV. 803, 808 (2001). See generally Casey B. Mulligan & Andrei Shleifer, *The Extent of the Market and the Supply of Regulation*, 120 Q.J. ECON. 1445 (2005) (providing analysis regarding the extent and limit of regulation through a fixed-cost theory of regulation); J.B. Ruhl & James Salzman, *Mozart and the Red Queen: The Problem of Regulatory Accretion in the Administrative State*, 91 GEO. L.J. 757 (2003) (detailing a systems-based model to understand regulatory burdens).

6. A pending lawsuit challenges EO 13,771 directly as an unconstitutional exercise of executive power because it “revise[s] statutes to condition issuance of new regulations on repeal of two or more existing regulations that offset the new costs” and also challenges the OMB Guidance Memorandum implementing EO 13,771 as arbitrary and capricious in violation of the Administrative Procedure Act. Plaintiffs’ Motion for Summary Judgment at 38, *Pub. Citizen, Inc. v. Trump*, 297 F. Supp. 3d 6 (D.D.C. 2018) (No. 17-253). The court ruled that the plaintiffs lacked both organizational and individual standing to pursue these claims, though final judgment has not yet been entered as of the date of this publication. *Pub. Citizen, Inc. v. Trump*, 297 F. Supp. 3d 6, 40 (D.D.C. 2018). Future challenges to EO 13,771 are likely to arise in challenges to agency decisions to rescind particular regulations that are not justified by traditional regulatory analysis and that seem to be motivated primarily to the requirement to rescind two regulations before promulgating another one. Challenges are also likely to arise to agency decisions to delay rulemaking or deny rulemaking petitions based on their need to first repeal two other regulations.

promised to “remove bureaucrats who only know how to kill jobs.”⁷ Upon signing EO 13,771, he said that the purpose of the Order was to eliminate “the repetitive, horrible regulations that hurt companies, hurt jobs.”⁸ At a briefing on the implementation of EO 13,771, President Trump stood between two piles of paper—one more than six feet tall and comprised of multiple stacks, the other, a single stack about six inches high.⁹ “This is today,” the President said, gesturing toward the larger pile, towering over him.¹⁰ “This is 1960,” he said, indicating the small stack of paper.¹¹ He then cut a piece of ceremonial red tape connecting the two piles, and went on to discuss how his administration’s regulation-cutting project had already resulted in increased wages, lower unemployment, rising economic growth, and “the stock market . . . soaring to new record levels.”¹² These claims have been echoed by supportive interest groups. The U.S. Chamber of Commerce, for instance, has been vocal in its support of 2-for-1 on the grounds that it will “drive growth and jobs.”¹³ The Competitive Enterprise Institute has argued in support of the Order as well, stating that the removal of regulations “would provide genuine economic stimulus.”¹⁴

7. Tamara Keith et al., *Fact Check: Donald Trump Unveils His Economic Plan in Major Detroit Speech*, NPR ONLINE (Aug. 8, 2016), <http://www.npr.org/2016/08/08/488816816/donald-trump-looks-to-turn-the-page-on-bad-week-with-economic-speech>; see also Office of Budget & Spending, *Remarks by President Trump on Deregulation*, WHITEHOUSE.GOV (Dec. 14, 2017), <https://www.whitehouse.gov/briefings-statements/remarks-president-trump-deregulation> (commenting that regulations have cost the “country trillions and trillions of dollars, millions of jobs, countless American factories, and devastated many industries”).

8. UPI, *Trump Signs Executive Order on Regulatory Reform*, BREITBART (Feb. 24, 2017), <http://www.breitbart.com/news/trump-signs-executive-order-on-regulatory-reform>.

9. CNBC, *President Donald Trump: Regulation Is a Stealth Taxation, Let’s Cut the Red Tape*, YOUTUBE (Dec. 14, 2017), <https://www.youtube.com/watch?v=BtkuyWTpnmQ>.

10. *Id.*

11. *Id.*

12. Office of Budget & Spending, *Remarks by President Trump on Deregulation*, WHITEHOUSE.GOV (Dec. 14, 2017), <https://www.whitehouse.gov/briefings-statements/remarks-president-trump-deregulation>.

13. Robb Mandelbaum, *Trump’s Regulation Order: What It Means For Small Businesses*, FORBES (Jan. 31, 2017), <https://www.forbes.com/sites/robbmandelbaum/2017/01/31/trumps-regulation-order-take-it-seriously-maybe-not-literally/#f2d0c895d375> (describing the organizations and interest groups that support the Order).

14. TEN THOUSAND COMMANDMENTS, *supra* note 5, at 54.

In this Article, I evaluate the empirical and legal value of regulation counting studies in light of prevailing standards in social science research. I argue that regulation counting studies do not, and cannot, rationalize deregulatory policies like 2-for-1 because they are, themselves, irrational and empirically unsound. The trouble with counting is that it does not measure variables capable of yielding valid causal statistical inferences. The validity of empirical claims arising out of regulation counting studies depends on their proponents' ability to demonstrate that regulation counts are an accurate measure of some relevant construct, and to theorize and empirically establish a causal relationship between that construct and the economic outcomes of interest. In the social science literature, this is referred to as "construct validity."¹⁵ It is commonly claimed that regulation counts are a proxy for the construct of costs or burdens on regulated entities.¹⁶ While these claims have undeniable political appeal, as I elaborate below, there are no good reasons to believe that counting the number of regulations is a useful proxy for the costs or burdens of regulation. If regulation counts are not a good proxy for mechanisms like cost or burden that are purported to affect economic outcomes, they have limited ability to support causal claims about the relationship between regulation and economic outcomes.

Why should anyone care about the empirical validity of a relatively small body of poorly (or cynically) conducted research? First, it is important to promote integrity in empirical research on regulation, because such research shapes regulatory policy.¹⁷

15. See generally Vladimir Atanasov & Bernard Black, *Shock-Based Causal Inference in Corporate Finance Research*, 5 CRITICAL FIN. REV. 207 (discussing "construct validity" and showing that the usefulness of a count variable requires theoretical construct validity); Michael Klausner, *Fact and Fiction in Corporate Law and Governance*, 65 STAN. L. REV. 1325 (2013) (demonstrating that counting studies in corporate governance do not actually measure anything meaningful).

16. These constructs tend to be vaguely defined in the literature, but they generally refer to the direct costs regulated entities incur to operate in compliance with legal obligations or the opportunity costs of lost efficiency or productivity attributable to regulations. See *infra* note 223.

17. The use of unsound empirical studies is nothing new. Cost benefit analysis (CBA) was initially sold based on a suite of widely circulated regulatory scorecards that purported to demonstrate that the costs of government regulations vastly outweigh their benefits. These studies have been debunked. See FRANK ACKERMAN & LISA HEINZERLING, PRICELESS: ON KNOWING THE PRICE OF EVERYTHING AND THE VALUE OF NOTHING 35–40 (2004); Richard W. Parker, *Grading the Government*, 70 U. CHI. L. REV. 1345, 1347–48 (2003). The practice

Administrators are policy-makers who engage in fact-based decision-making, and the facts upon which they rely often come from empirical research. Administrative decisions are only as sound as the research upon which they are based, thus there is a strong interest in promoting high quality research on regulation.

Second, empirical research is used by agencies to support their policies on judicial review. The Administrative Procedure Act (APA)¹⁸ requires agencies to articulate a rational connection between the facts before the agency and the policy choices made by the agency.¹⁹ Administrative decisions that lack a rational foundation are deemed arbitrary and capricious and must be struck down by reviewing courts.²⁰ Agencies often cite empirical studies to demonstrate the rationality of their decisions, and reviewing courts will find agency decisions arbitrary and capricious if they are not sufficiently justified by the empirical evidence before the agency.²¹

The logic of regulation counting studies that empirically tie regulation counts to macroeconomic outcomes appears calculated to resonate with widely accepted efficiency rationales for cost-benefit analysis (CBA). CBA, instituted through a series of executive orders issued by Presidents dating back to Jimmy Carter,²² rests on the premise that when agencies have the statutory discretion to do so, they should make policy decisions in a

of CBA has improved as it has assimilated critiques of cruder versions. *See generally* RICHARD L. REVESZ & MICHAEL A. LIVERMORE, *RETAKING RATIONALITY: HOW COST-BENEFIT ANALYSIS CAN BETTER PROTECT THE ENVIRONMENT AND OUR HEALTH* (2008) (describing the need for cost-benefit analysis in the regulatory toolbox and how CBA's flaws can be remedied).

18. 5 U.S.C. ch. 5 (2011).

19. *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 416–17 (1971).

20. *See* 5 U.S.C. § 706(2) (1966); *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983); *Citizens to Preserve Overton Park*, 401 U.S. at 416.

21. *See, e.g., State Farm*, 463 U.S. at 46 (rejecting Department of Transportation's decision to rescind rule requiring passive restraints despite studies suggesting that these requirements would increase seatbelt usage and save lives); *Bus. Roundtable v. SEC*, 647 F.3d 1144, 1148–49 (D.C. Cir. 2011) (rejecting the Securities and Exchange Commission's proxy access rule for failing to include appropriately rigorous economic analysis regarding several of the issues before the agency).

22. *See* Exec. Order No. 12,044, 43 Fed. Reg. 12,661 (Mar. 23, 1978) (Carter EO directing all executive agencies to improve existing and future regulations); Exec. Order No. 12,291, 46 Fed. Reg. 13,193 (Feb. 17, 1981) (Reagan EO reducing burdens for existing and future regulations); Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Sept. 30, 1993) (Clinton EO reforming and improving regulations

way that maximizes aggregate welfare, meaning the benefits of regulation net its costs.²³

There currently is broad scholarly and political consensus that “Presidents can legitimately influence the development of regulations—at least when the goal is to ensure that the regulations promote societal welfare to the extent permitted by law.”²⁴ The requirement to maximize efficiency through administrative policy has been described colloquially as nothing more than the proposition “that agencies should attempt to produce more good than harm.”²⁵ In fact, CBA has become so deeply entrenched in federal administrative policymaking that Cass Sunstein, a prominent former skeptic of CBA,²⁶ now argues that it might be arbitrary and capricious if agencies fail to justify their decisions based on an analysis of quantified benefits and costs (absent statutory mandates prohibiting them from doing so).²⁷ Some have interpreted recent U.S. Supreme Court case law to endorse this position.²⁸

It is not surprising, then, that supporters of EO 13,771 have suggested that 2-for-1 is merely an extension of cost-benefit analysis,²⁹ and thus can be rationalized on similar grounds. The

to maximize economic growth); Exec. Order No. 13,422, 72 Fed. Reg. 2,763 (Jan. 18, 2007) (Bush EO inserting CBA policies and preferences into regulatory process); Exec. Order No. 13,563, 76 Fed. Reg. 3,821 (Jan. 18, 2011) (Obama EO directing agencies to streamline promulgation processes to better protect citizens and to maximize economic benefits of the regulatory process).

23. Cass R. Sunstein, *Cost-Benefit Analysis and Arbitrariness Review*, 41 HARV. ENVTL. L. REV. 1, 9–10 (2017) [hereinafter *CBA & Arbitrariness Review*].

24. Cecot & Livermore, *supra* note 3, at 3.

25. *CBA & Arbitrariness Review*, *supra* note 23, at 9.

26. See generally Cass R. Sunstein, *Cost-Benefit Analysis and the Separation of Powers*, 23 ARIZ. L. REV. 1267 (1981) (critiquing the executive branch’s use of cost-benefit analysis as a tool to control agency actions).

27. See *CBA & Arbitrariness Review*, *supra* note 23, at 9.

28. See *Capping Regulation*, *supra* note 3, at 5 (“Indeed, recent Supreme Court decisions have indicated that it would be unreasonable for agencies *not* to consider benefits and costs in making regulatory decisions.” (citing *Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015))).

29. See Reply in Support of Defendant’s Motion to Dismiss at 20, Pub. Citizen, Inc. v. Trump, 297 F. Supp. 3d 6 (D.D.C. 2018) (No. 17-253) (“Executive Order 13,771, like its predecessors, recognizes that agencies must inherently weigh conflicting goals, priorities, and associated costs as a necessary part of reasoned decisionmaking under the APA.”); see also TED GAYER, ROBERT LITAN & PHILIP WALLACH, BROOKINGS CTR. ON REGULATION & MKTS., EVALUATING THE TRUMP ADMINISTRATION’S REGULATORY REFORM PROGRAM 3 (2017), https://www.brookings.edu/wp-content/uploads/2017/10/evaluatingtrumpregreform_gayerlitanwallach_102017.pdf [hereinafter BROOKINGS EVALUATION] (situating EO 13,771 as part of a broader bipartisan effort to “require agencies

difficulty with this gambit is that 2-for-1 explicitly rejects the well-established efficiency maximization lodestar on which CBA rests. Contrary to CBA, 2-for-1 addresses only the costs (and not the benefits) of regulations, and the OMB Guidance Memorandum implementing the Order expressly prohibits agencies from considering the benefits of regulation in deciding which regulations must go and which may stay.³⁰ This is, quite simply, unjustifiable under fundamental principles of welfare economics: “At least as far as economic theory is concerned, any new regulation that offers more benefits than costs should be undertaken, regardless of its contribution to the aggregate regulatory cost to society.”³¹ If EO 13,771 cannot be justified by the efficiency rationale underlying CBA, it must rest on some other principled basis. This is where regulation counting studies come in. They promise to provide empirical support for the policy of reducing regulation counts in the service of promoting desired (and ostensibly more efficient) macro-economic outcomes. This Article explains why they fail to deliver on that promise and, thus, why such studies cannot rationalize EO 13,771 or administrative decisions based on it.³²

Finally, it is important to understand the regulation counting project on its own terms because it reveals deeper insights into the broader project of deregulation. Specifically, the practice

to pay greater heed to analyzing the costs and benefits of major new regulations”); BENJAMIN M. MILLER ET AL., RAND CORP., *INCHING TOWARD REFORM: TRUMP’S DEREGULATION AND ITS IMPLEMENTATION* (2017) (characterizing EO 13,771 as a way of forcing agencies to more accurately account for costs in their cost-benefit analyses); Susan Dudley et al., *Consumer’s Guide to Regulatory Impact Analysis: Ten Tips for Being an Informed Policymaker*, 8 J. BENEFIT-COST ANALYSIS 2, 187, 190 (2017) (“The OMB’s guidance on [EO 13,771] . . . may lead to an increased use of RIAs to examine the effects of modifying existing regulations, as well as prospective regulations.”).

30. See OMB GUIDANCE, *supra* note 2, at 2.

31. BROOKINGS EVALUATION, *supra* note 29, at 5 (emphasis in original).

32. Decisions made pursuant to EO 13,771 cannot be justified based solely on the President’s power to direct executive agency policymaking. While the President has broad discretion to direct executive agencies to implement statutes consistent with the administration’s policy preferences and priorities, the President does not have the power to direct agencies to make policy decisions that are arbitrary and capricious. See *Pub. Citizen Health Res. Grp. v. Tyson*, 796 F.2d 1479, 1495 (D.C. Cir. 1986). See generally Steven G. Calabresi & Saikrishna B. Prakash, *The President’s Power To Execute the Laws*, 104 YALE L.J. 541 (1994) (explaining that the President’s reach of power is broad when executing laws that are consistent with the administration’s policy); Elena Kagan, *Presidential Administration*, 114 HARV. L. REV. 2245 (2001) (same); Strauss, *supra* note 5, at 4 (explaining that if the rules are appropriately adopted and do not question other authorities, they will generally be valid).

of regulation counting suggests that the true foundation of the deregulation movement lies not in concerns about economic efficiency, but rather in fervent feelings and fears about regulation's restrictions on liberty,³³ particularly the freedom to conduct business. It is vital to recognize these feelings and fears as the wellspring of the deregulatory impulse if we ever are to advance legal and political debates about regulation. In the meantime, however, it is urgent to stress that inflamed regulatory passions cannot serve as a rational basis supporting regulatory reform policies implemented by agencies.

The Article proceeds as follows. Part I describes the methodology of counting projects, including what counts and how it is counted. Part II lays out my critique of counting methodologies. I explain the necessity of construct and measurement validity for generating valid statistical inferences and then discuss why regulation counts are not a valid measure of any of the constructs that have been proffered by regulation counters, including the costs, burdens or constraints of regulation on regulated entities. Part III explores the question of what, if anything, regulation counts could signify even if they do not measure costs, burdens, or constraints on regulated entities. I suggest in this Part that regulation counts may be an attempt to represent what I call the "unquantifiable costs" of regulation, including regulation's restrictions on liberty and the psychic burdens it imposes on certain segments of the business community. I argue that, standing alone, neither psychic burdens nor the desire to feel more free provide rational support for deregulatory counting policies. However, I argue that recognizing these unquantifiable costs of regulation could help advance dialogue about regulatory reform. Finally, Part IV discusses the very real harms and costs of the counting project and explains why it is time to stop counting and start engaging in meaningful dialogue about specific societal problems and appropriate regulatory responses.

I. WHAT COUNTS?

The first and critical step in any counting project is to define the universe of things to be counted. That universe may be defined capaciously, as it is by Count von Count, the Transylvanian expatriate on Sesame Street, whose sampling heuristic is: "there

33. See Jodi L. Short, *The Paranoid Style in Regulatory Reform*, 63 *HASTINGS L.J.* 633, 636–37 (2012) (demonstrating that concerns about regulation's restrictions on liberty dominated debates about regulatory reform between 1980 and 2005).

is always something to count.”³⁴ Indeed, the Count will count whatever he encounters in his immediate sensory field, be it hot dogs, oranges, building floors, telephone rings, or even the sheep in his friends’ dreams.³⁵ Below, I describe the variety of different approaches regulation counters have taken to define the things to be counted in their universe. Section A describes the counting methodology of EO 13,771. Section B discusses the largely discredited methodologies that have traditionally been used in counting studies. Section C lays out the counting methodology used by RegData, which to date has not been scrutinized. This Article’s critique of counting focuses on RegData because it purports to be the state-of-the-art in regulation counting and has been marketed to government officials as a tool for deciding which regulations to cut.

A. COUNTING METHODOLOGY OF EO 13,771

Unlike many academic counting projects, EO 13,771 requires agencies to count both regulations and costs.³⁶ In addition to the 2-for-1 requirement, the Order implements a type of regulatory budget³⁷ that requires agencies to offset fully the costs of

34. *Sesame Street: Ernie Takes on the Count’s Job* (PBS television broadcast May 4, 2000), <https://www.youtube.com/watch?v=xkfU1pziqwg>.

35. *See, e.g., id.*

36. EO 13,771, § 2(a) provides that “[u]nless prohibited by law, whenever an executive department or agency (agency) publicly proposes for notice and comment or otherwise promulgates a new regulation, it shall identify at least two existing regulations to be repealed.” Exec. Order No. 13,771, 82 Fed. Reg. 9339, 9339 (Jan. 30, 2017). In furtherance of this requirement, EO 13,771 also requires that “any new incremental costs associated with new regulations shall, to the extent permitted by law, be offset by the elimination of existing costs associated with at least two prior regulations.” *Id.*

37. A regulatory budget is a shadow budget that caps the costs an agency can “require private agents to consume in the pursuit of the regulatory goal.” Robert W. Crandall, *Federal Government Initiatives To Reduce the Price Level*, 1978 BROOKINGS PAPERS ON ECON. ACTIVITY 401, 429 (1978). The idea of a regulatory budget was introduced by Robert Crandall, who saw it as a way of “confronting regulators with the costs of their actions.” *Id.* A variety of different models for implementing a regulatory budget have been proposed. *See, e.g.*, Christopher C. DeMuth, *The Regulatory Budget*, REGULATION 29, 30–31 (1980) (proposing that the federal government “establish an upper limit on the costs of [federal] regulatory activities to the economy and . . . apportion this sum among the individual regulatory agencies”); Susan E. Dudley, *Can Fiscal Budget Concepts Improve Regulation?* 19 N.Y.U. J. LEGIS. & PUB. POL’Y 259, 265 (2016) (“Operationally, a regulatory budget would share similarities with the fiscal budget.”); Eric A. Posner, *Using Net Benefit Accounts to Discipline Agencies: A Thought Experiment*, 150 U. PA. L. REV. 1473, 1477–84 (2002) (proposing a net benefit account budget, in which agencies would be required to keep positive

new regulations through the repeal of existing regulations.³⁸ According to the OMB Guidance Memorandum, to comply with EO 13,771, agencies must issue two deregulatory actions³⁹ for each regulatory action.⁴⁰ This requirement is meant to ensure that the incremental costs associated with the total number of regulatory actions are fully offset by the cost savings of deregulatory actions.⁴¹

balances on ledgers that tally the benefits and costs of every regulation promulgated by the agency); Jeffrey A. Rosen & Brian Callanan, *The Regulatory Budget Revisited*, 66 ADMIN. L. REV. 835, 837 (2014) (suggesting that regulatory costs should be considered as the equivalent of tax dollars). Notably, most previously proposed regulatory budget designs envisioned involvement from Congress as well as the executive branch. See BROOKINGS EVALUATION, *supra* note 29, at 6–11.

38. Exec. Order No. 13,771 § 2(c), 82 Fed. Reg. 9339 (Jan. 30, 2017).

39. The OMB Guidance Memorandum defines an “EO [13,771] deregulatory action” as an action that has been finalized and has total costs less than zero. OMB GUIDANCE, *supra* note 2, at 4. EO 13,771 deregulatory actions are not limited to those actions that would be defined as significant under EO 12,866, and they may be issued in a wide range of forms, including rulemaking; guidance or interpretive documents; or streamlining of information requests like recordkeeping, reporting, or disclosure requirements. *Id.* The OMB Memorandum explains that EO 13,771 regulatory actions subsequently overturned by Congress, for instance under the Congressional Review Act, count as “EO [13,771] deregulatory actions.” *Id.* at 7. By contrast, it takes a case-by-case approach to regulatory actions vacated by judicial order. *See id.*

40. OMB GUIDANCE defines “EO [13,771] regulatory action” as a “significant regulatory action” that has been finalized, and that imposes total costs greater than zero. *Id.* at 3. “Significant regulatory action,” as defined by reference to EO 12,866, § 3(f), is defined in that EO as:

any regulatory action that is likely to result in a rule that may: (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities; (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) Raise novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in this Executive Order.

Exec. Order No. 12,866, 58 Fed. Reg. 190 (Oct. 4, 1993). The Memorandum explicitly includes significant guidance and interpretive documents in the definition of EO 13,771 regulatory actions. OMB GUIDANCE, *supra* note 2, at 3. It specifies that the Order’s requirements apply to all EO 13,771 regulatory actions issued after noon on January 20, 2017. *See id.* at 1–2.

41. According to the Memorandum, only those regulatory impacts that have traditionally been counted as costs when taking a regulatory action should be counted as cost savings when taking an EO 13,771 deregulatory action. *Id.* at 9. In other words, cost savings that an agency has traditionally counted as benefits when taking regulatory action cannot be counted as reductions in costs for purposes of EO 13,771 deregulatory actions. Thus, the guidance makes clear that

This methodology requires determining what counts as a regulatory or deregulatory action, and OMB has decided that the two will be distinguished by focusing on a particular set of costs. The OMB Guidance Memorandum provides that, generally, costs should be counted using the methods and concepts articulated in OMB Circular A-4, which was released in 2003, to assist agencies in conducting cost-benefit analyses required under EO 12866.⁴² However, costs are defined much more narrowly under EO 13,771. As has been widely observed and criticized,⁴³ the only costs that count for purposes of EO 13,771 are compliance costs to regulated entities.⁴⁴ For instance, lost benefits to the public or to regulated entities are not to be counted as costs of deregulatory actions.⁴⁵ So, for instance, if an energy conservation regulation produces measurable cost savings to regulated entities in

agencies should not count net costs of deregulatory actions, but only those financial impacts that would typically appear on the cost side of the cost-benefit analysis ledger in the initial regulatory analysis. *See id.* at 9.

42. *Id.*

43. *See* Cecot & Livermore, *supra* note 3, at 3 (“We conclude that the Order is not calibrated to maximize social welfare because it narrowly focuses on the costs of regulation to regulated entities and fails to acknowledge the benefits of regulation.”); *Capping Regulation*, *supra* note 3, at 5 (suggesting that it would be irrational not to consider net benefits to “distinguish a good rule from a bad rule.”); Jeffrey S. Lubbers, *Comments on OMB’s Interim Guidance Implementing Section 2 of Executive Order 13,771 “Reducing Regulation and Controlling Regulatory Costs”*, 42 ADMIN. & REG. L. NEWS 7, 8 (2017) (asserting that the “overall main shortcoming” of EO 13,771 is “that it does not account for the benefit of regulations at all”); David A. Dana & Michael R. Barsa, *The High Cost of Cutting Regulatory Costs*, CHI. TRIB. (Feb. 24, 2017), <http://www.chicagotribune.com/news/opinion/commentary/ct-epa-anti-regulatory-trump-epa-executive-order-perspec-0227-jm-20170223-story.html> (“By focusing on only the costs of complying with the regulation, and not on the costs that the regulation is trying to prevent, Trump’s order puts us all at grave risk.”); Jody Freeman, *Trump’s “2 for 1” Executive Order*, ENVTL. L. HARV. (Jan. 30, 2017), <http://environment.law.harvard.edu/2017/01/freemanstatement> (arguing that EO 13,771 would “strangle even the most beneficial rules under the guise of cutting red tape”); Amit Narang, *The Stunning Triumph of Cost-Cost Analysis*, REG. REV. (Feb. 19, 2017), <http://www.regblog.org/2017/02/19/narang-stunning-triumph-cost-cost-analysis> (“[T]he [Order] spells the end of cost-benefit analysis and the rise of a new form of analysis that focuses only on regulatory costs while ignoring benefits.”).

44. If an agency is unsure whether an ambiguous item counts as a cost or a benefit, the Memorandum provides that it should be categorized to conform to accounting conventions the agency has followed in past analyses. So, for instance, if the agency has historically categorized fuel savings associated with energy efficiency investments as benefits, it should continue to do so and should not count them as negative cost savings when deregulating. OMB GUIDANCE, *supra* note 2, at 9.

45. *Id.*

the form of lower energy costs, the loss of this benefit cannot be counted as a cost of repealing this regulation.

Although EO 13,771 contains a cost parameter, straight-up regulation counting remains fundamental to its operation. Even if the repeal of a *single* existing regulation would *fully offset* the costs of a proposed regulation, the proposing agency still must identify a *second* regulation for repeal before proposing the new regulation. Any rule on the books is a candidate to be the second regulation repealed, so long as it imposes present costs greater than zero on regulated entities.⁴⁶

B. COUNTING METHODOLOGY OF REGULATION-COUNTING STUDIES

In contrast to EO 13,771, counting studies typically count only regulations and not costs. This choice of object is odd in light of the fact, discussed below, that most regulation counters see the number of regulations as a proxy for the costs to regulated entities. Yet, instead of attempting to count those costs, they count regulations instead.

Many regulation counting studies have taken a broad and undifferentiated approach to regulation counting, not unlike

46. The Memorandum clarifies the Order's caveat that the 2-for-1 deal applies "unless prohibited by law." *Id.* at 5. Regulatory actions that are statutorily or judicially required do not count for purposes of the EO 13,771 regulatory action tally. *See id.* at 2. The Memorandum interprets a statutorily required regulatory action as one for which Congress has provided by statute both "an explicit requirement and explicit timeframe." *Id.* at 5. For example, the following statute would be considered to statutorily require a regulatory action: The FDA "shall issue nutrition labeling requirements within 10 years" of the statute's enactment date. *Id.* However, a statute that required the FDA to issue nutrition labeling requirements when necessary to promote the purposes of the statute would not be considered to statutorily require regulatory action. A judicially required regulatory action is one for which there is a "judicially established binding deadline for rulemaking, including deadlines established by settlement agreement or consent decree." *Id.* The Memorandum further explains that EO 13,771 does not change agencies' obligations under statutes that prohibit the consideration of costs in determining a statutorily required standard. *Id.* at 8. However, it provides that while agencies may issue such regulations without first identifying offsetting deregulatory actions, they "will generally be required to offset the costs of such regulatory actions through other deregulatory actions taken pursuant to statutes that do not prohibit consideration of costs." *Id.*

Count von Count's. For instance, studies have counted the number of pages in the *Federal Register*⁴⁷ or the *Code of Federal Regulations* (C.F.R.),⁴⁸ or the number of bits⁴⁹ in digitized state statutory codes.⁵⁰ Cross-national comparative studies have used indices derived from Organization for Economic Cooperation and Development (OECD) and World Bank data.⁵¹ Each of these

47. See, e.g., MAEVE P. CAREY, CONG. RESEARCH SERV., COUNTING REGULATIONS: AN OVERVIEW OF RULEMAKING, TYPES OF FEDERAL REGULATIONS, AND PAGES IN THE *FEDERAL REGISTER* (2016); *Regulators and Redskins*, *supra* note 5, at 195–201. See generally TEN THOUSAND COMMANDMENTS, *supra* note 5.

48. See Dawson & Seater, *supra* note 5; Clyde W. Crews, *New Data: Code of Federal Regulations Expanding, Faster Pace Under Obama*, COMPETITIVE ENTERPRISE INST. (Mar. 17, 2014), <https://cei.org/blog/new-data-code-federal-regulations-expanding-faster-pace-under-obama>.

49. Bit is short for “binary digit” and is the smallest, most basic unit of data in computing. See *Bit*, TECHOPEDIA, <https://www.techopedia.com/definition/23954/bit> (last visited Oct. 15, 2018); *Bits and Bytes*, STAN., <https://web.stanford.edu/class/cs101/bits-bytes.html> (last visited Oct. 15, 2018).

50. See Mulligan & Shleifer, *supra* note 5, at 1469–72.

51. See, e.g., Simeon Djankov, Caralee McLiesh & Rita Ramalho, *Regulation & Growth*, 92 *ECON. LETTERS* 395, 395–401 (2006); Norman V. Loayza, Ana María Oviedo & Luis Servén, *Regulation & Macroeconomic Performance*, in *BUSINESS REGULATION AND ECONOMIC PERFORMANCE* (Norman V. Loayza & Luis Servén eds., 2010) (analyzing both World Bank and OECD data); Alberto Alesina et al., *Regulation and Investment* 1–3 (Nat'l Bureau of Econ. Research, Working Paper No. 9560, 2003); Andrea Bassanini & Ekkehard Ernst, *Labour Market Institutions, Product Market Regulation, & Innovation: Cross-Country Evidence* 5–31 (OECD Econ. Dep't, Working Paper No. 316, 2002); Daniel Kaufman, Aart Kraay & Massimo Mastruzzi, *Governance Matters VIII: Aggregate and Individual Governance Indicators 1996–2008* (World Bank Pol'y Research, Working Paper No. 4978, 2009); Norman V. Loayza, Ana María Oviedo & Luis Servén, *The Impact of Regulation on Growth and Informality: Cross-Country Evidence* 3 (World Bank, Working Paper No. S3623, 2005); Giuseppe Nicoletti et al., *Product and Labor Market Interactions in OECD Countries* 5–108 (OECD Econ. Dep't, Working Paper No. 312, 2001); Giuseppe Nicoletti & F. L. Pryor, *Subjective & Objective Measures of the Extent of Governmental Regulations* 4–22 (OECD & Swarthmore College, Working Paper, 2001); Giuseppe Nicoletti & Stefano Scarpetta, *Regulation, Productivity & Growth: OECD Evidence* 5–63 (OECD Econ. Dep't., Working Paper No. 347, 2003); Giuseppe Nicoletti, Stefano Scarpetta & Olivier Boylaud, *Summary Indicators of Product Market Regulation with an Extension to Employment Protection Legislation* 7–84 (OECD Econ. Dep't, Working Paper No. 226, 2000). This body of literature is beyond the scope of this article and has been thoroughly criticized elsewhere. See, e.g., *THE QUIET POWER OF INDICATORS: MEASURING GOVERNANCE, CORRUPTION AND THE RULE OF LAW* (Sally Engle Merry, Kevin E. Davis & Benedict Kingsbury eds., 2015) (presenting case studies illustrating how global indices measuring regulation mask important issues of context and power); Janine Berg & Sandrine Cazes, *Policymaking Gone Awry: The Labor Market Regulations of the Doing Business Indicators*, 29 *COMP. LAB. L. & POL'Y J.* 349, 350 (2008) (arguing that the World Bank's *Doing Business* index measures of labor market regulations are “based

counting methodologies has been roundly criticized for its inaccuracy and inadequacy.⁵² The *Federal Register* contains not only final rules but proposed rules that may never become law, as well as public notices, executive orders, proclamations, and other presidential documents.⁵³ In addition, many of its pages are consumed by the extensive justifications that accompany final rules to satisfy the demands of arbitrary and capricious review.⁵⁴ The C.F.R. codifies only finalized regulations, but “[p]age-count data are subject to the criticism that not all pages are equal. A page could be of enormous or trivial consequence to the economy.”⁵⁵ Digital file size measures suffer from similar defects in that they are totally undifferentiated as to content. These shortcomings introduce measurement error into studies employing these types of counts and undermine their empirical validity.

C. COUNTING METHODOLOGY OF REGDATA

The latest innovation in regulation counting methodology is the “Industry-specific Regulatory Constraint Database,” developed by researchers at the Mercatus Center at George Mason University. Recently renamed “RegData,” presumably in an attempt to mask its ideological pedigree, the database tallies the number of regulatory constraints applicable to different industries over the fifteen-year period from 1997–2012.⁵⁶ The methodology used to count regulatory constraints is as follows:

on a partial and crude understanding of how labor markets and their institutions function”); Kevin E. Davis & Michael B. Kruse, *Taking the Measure of Law: The Case of the Doing Business Project*, 32 LAW & SOC. INQUIRY 1095 (2007) (highlighting the challenges of measuring country-level legal variables in the face of legal complexity and uncertainty); Alvaro Santos, *Labor Flexibility, Legal Reform, and Economic Development*, 50 VA. J. INT’L L. 43, 45 (2009) (arguing that the World Bank *Doing Business* indicator “contains a number of very serious omissions that seem to stem from a flawed understanding of regulation”).

52. See *RegData*, *supra* note 4, at 111–12; Ruhl & Salzman, *supra* note 5, at 769–75.

53. See generally Federal Register, *About the Federal Register*, NAT’L ARCHIVES, <https://www.archives.gov/federal-register/the-federal-register/about.html> (last updated Aug. 8, 2018) (detailing the types of sources included in the Federal Register).

54. Ruhl & Salzman, *supra* note 5, at 772.

55. *RegData*, *supra* note 4, at 112; see also Dawson & Seater, *supra* note 5, at 139 (recognizing that “[a] counting measure obviously is imperfect in that two identical values may comprise regulations of different types and, even within a given type, may represent regulations of different stringency”).

56. *RegData*, *supra* note 4, at 109.

Regulatory texts typically use a relatively standard suite of verbs and adjectives to indicate a binding constraint, such as “shall,” “must,” and “prohibited.” This observation motivated us to search the CFR for keywords that are likely to indicate binding constraints. As a departure point, we search for five strings that are likely to limit choice sets: “shall,” “must,” “may not,” “prohibited,” and “required.” We refer to this set of five strings as “restrictions.”⁵⁷

These search terms are the sole criteria applied to identify what counts as a regulatory constraint.⁵⁸ The creators classify restrictions identified by this methodology by the industries to which they apply.⁵⁹

RegData is a particularly important development in the regulation counting project for four reasons. First, RegData claims to be the state-of-the-art in regulation counting, improving upon prior methods by counting only those provisions of the C.F.R. that impose regulatory demands⁶⁰ or restrictions⁶¹ and by mapping those restrictions by industry, thus allowing for cross-industry comparisons of regulatory outcomes. Second, while prior counting methods have been thoroughly critiqued, including by the authors of RegData, the shortcomings of RegData have not yet been addressed. Third, RegData was recently made publicly available, together with a call that it be used to identify causal relationships between regulation counts and various macroeconomic outcome variables of interest, including employment and productivity.⁶² It is important to clarify the meaning of the variables it has constructed in order to properly interpret any results produced by future studies. Fourth, RegData is being marketed to government officials as “a research platform that allows users to quickly analyze state regulations and identify the specific industries most targeted by excessive regulation.”⁶³ It has been used by the Governor of Iowa to identify “onerous” regulations

57. *Id.* at 112.

58. *Id.*

59. The authors employ a complex methodology for industry coding that is described in Online Appendix B. *Id.* at app. B (describing their methodology for industry coding). I do not discuss this methodology here because it is outside the scope of the critique developed in this Article. Allocating regulations by industry does not mitigate any of the methodological problems identified below.

60. *RegData*, *supra* note 4, at 110.

61. *Id.* at 112.

62. *Id.*

63. Rod Boshart, *Iowa Confident Alert System Won't Send False Alarm*, GAZETTE (Jan. 16, 2018), <http://www.thegazette.com/subject/news/government/iowa-confident-alert-system-wont-send-false-alarm-20180116>.

for repeal⁶⁴ and by officials implementing a 2-for-1 policy in British Columbia, Canada,⁶⁵ suggesting that RegData is poised to gain more widespread use by governments implementing regulation counting policies and thus must be taken seriously not only as an intellectual project, but also a policy tool. For these reasons, RegData and its counting methodology will be the focus of this Article's empirical critique.

II. THE TROUBLE WITH COUNTING

This Part provides a basic introduction to the fundamental elements necessary to draw valid causal inferences from empirical studies and explains why regulation counting studies lack these elements, illustrating key points with concrete examples drawn from the C.F.R. Empirical studies use quantified variables to measure observable phenomena in the world (for instance, the costs of regulation or employment levels) and to establish their statistical relationship with one another. If certain conditions are met, quantitative studies can indicate causal relationships between variables, establishing, for instance, that one observable phenomena (e.g. regulatory costs) is the cause of another (e.g. employment levels).

The validity of a causal statistical inference depends on many factors, but the most basic and fundamental is measurement validity, or the fit between a variable and the conceptual definition of the construct that the variable purports to measure. Stated simply, to produce valid statistical inferences, an explanatory variable must have a well-defined construct that is validly measured. A construct⁶⁶ is a hypothetical condition or mechanism explaining or predicting some outcome of interest. For in-

64. *Id.*

65. LAURA JONES, MERCATUS CTR., CUTTING RED TAPE IN CANADA: A REGULATORY REFORM MODEL FOR THE UNITED STATES? (2015), <https://www.mercatus.org/system/files/Jones-Reg-Reform-British-Columbia.pdf>. In addition to the province of British Columbia, various versions of the 2-for-1 policy have been adopted in other countries, including: Australia, Canada (federal), France, Germany, the Netherlands, Portugal, and the United Kingdom. Nicholas Bellos, *Is There an International Case for Trump's "One-in-Two-Out" Order?*, REG. REV. (Nov. 8, 2017), <https://www.theregreview.org/2017/11/08/bellos-international-trump-order>.

66. Different academic disciplines tend to use different statistical terminology. I use the term construct as it tends to be used in sociology and psychology literature, to refer to an explanatory concept hypothesized to have a statistical relationship with an outcome variable. Economists tend to use the term construct to refer to the observable measure of the underlying concept.

stance, intelligence is a construct that researchers might hypothesize explains outcomes like academic achievement, income, or wealth. Constructs (like intelligence) cannot be directly observed or measured, and so they must be operationalized as variables for statistical analysis by measuring some observable and quantifiable behavior or behavioral artifact. For instance, a researcher who wishes to test the effects of the construct of intelligence on particular outcomes might use IQ test scores as an observable proxy by which to measure it.

The validity of a measure depends on the extent to which it accurately quantifies the construct it purports to assess. For instance, it would be clearly invalid to use height as a measure of intelligence, because there is no plausible relationship between the construct (intelligence) and the measure (height). IQ scores present a more difficult case: while many dispute whether IQ scores measure intelligence,⁶⁷ they are widely used in studies as a proxy for intelligence or similar constructs.⁶⁸ Suppose the researcher described above finds in her statistical analysis that higher IQ scores (the measure) are causally related to higher incomes (the outcome). May she make the claim that intelligence (the construct) causes higher incomes (the outcome)? This claim will be valid only if IQ scores (the measure) accurately measure intelligence (the construct). The onus is on the researcher to demonstrate the relationship between construct and measure that supports the causal claim she wishes to make.

The fundamental problem with regulation counting projects is that they lack this rudimentary precondition of fit between construct and measure. This problem exists for two subsidiary reasons. First, as discussed in Section A below, the construct operationalized through the methodology of regulation counting is ill-defined, making both measurement and causal inference difficult, if not impossible. Second, as discussed in Section B.1–8

67. See, e.g., Stephen J. Ceci & Jeffrey K. Liker, *A Day at the Races: A Study of IQ, Expertise, and Cognitive Complexity*, 3 J. EXPERIMENTAL PSYCHOL. 255, 255 (1986) (arguing that “IQ is unrelated to real-world forms of cognitive complexity that would appear to conform to some of those that scientists regard as the hallmarks of intelligent behavior”).

68. See, e.g., LEWIS M. TERMAN & MAUD A. MERRILL, MEASURING INTELLIGENCE: A GUIDE TO THE ADMINISTRATION OF THE NEW REVISED STANFORD-BINET TESTS OF INTELLIGENCE (1949) (claiming that IQ tests measure intelligence); William W. Brown & Morgan O. Reynolds, *A Model of IQ, Occupation, and Earnings*, 65 AM. ECON. REV. 1002 (1975) (using IQ test scores as a proxy for intelligence); Jay L. Zagorsky, *Do You Have to Be Smart to Be Rich? The Impact of IQ on Wealth, Income and Financial Distress*, 35 INTELLIGENCE 489 (2007) (using IQ test scores as a proxy for intelligence).

below, the constructs that have been articulated by regulation counters cannot be measured accurately by counting the number of regulations or regulatory requirements in the C.F.R.

A. CONSTRUCT DEFINITION

A threshold problem with regulation counts is that it is not entirely clear what construct they are supposed to be measuring, or if they are meant to measure any construct at all. A count is nothing more than a number—like the number of telephone rings⁶⁹—unless it accurately measures some validly theorized explanatory construct. Regulation counts are often presumed to measure constructs like the costs or burdens of regulation. However, regulation counters have been reluctant to clearly define and theorize a stable, coherent construct that is accurately measured by regulation counts. This makes it difficult to know exactly what regulation counts measure and undermines causal claims based on them.⁷⁰

Some regulation counters do not bother to supply an explanatory construct, or seem to believe that the count of regulations is, itself, an explanatory construct that is causally related to outcome variables of interest.⁷¹ This is like claiming that the number of pages in the *Yellow Pages* causes traffic accidents. Now, it

69. Note that the number of telephone rings could be transformed into a construct if it had some significance independent of the absolute number—for instance, if the number of rings encoded some kind of message from caller to receiver. There is no indication in the Sesame Street sketch referenced above that the Count's caller is sending him an encoded message.

70. See Bernard S. Black et al., *Corporate Governance Indices and Construct Validity*, 25 CORP. GOVERNANCE: INT'L REV. 397, 398 (2017) (even if independent variables are properly measured, causal claims can fail “because the underlying theory that posits a relationship between the general aspect (board structure) and the outcome is wrong”).

71. See, e.g., HOWARD BEALES ET AL., REGULATORY TRANSPARENCY PROJECT, GOVERNMENT REGULATION: THE GOOD, THE BAD, & THE UGLY (2017), <https://regproject.org/paper/government-regulation-the-good-the-bad-the-ugly> (arguing, among other things, that “regulatory accumulation” is detrimental to the American economy); TEN THOUSAND COMMANDMENTS, *supra* note 5 (focusing throughout the report on pages in the C.F.R. devoted to final rules to determine regulatory burdens); JONES, *supra* note 65, at 22–24 (arguing that British Columbia's reduction in the number of regulations is the reason for the turnaround in its economy); Ronald Bailey, *Federal Regulations Have Made You 75 Percent Poorer*, REASON (June 21, 2013), <http://reason.com/archives/2013/06/21/federal-regulations-have-made-you-75-per> (arguing that “six decades of accumulated regulations” are responsible for suppressing the growth of GDP and household income); Michael Mandel, *Pebbles in the Stream: Does the FDA Slow Medical Technology Innovation?*, MANDEL ON INNOVATION & GROWTH (Dec. 4, 2010), <https://innovationandgrowth.wordpress.com/2010/12/04/pebbles-in-the>

may be the case that the number of pages in the *Yellow Pages* is a reasonable proxy for the number of people living in a particular locality, which may be a reasonable proxy for traffic volume, which might be causally related to the number of traffic accidents. But it *cannot* be the case that the number of pages in the phone book *causes* traffic accidents. In this example, the girth of the *Yellow Pages* is merely the measure of the explanatory construct, traffic volume. To draw meaningful inferences from a statistical relationship between the *Yellow Pages* and traffic accidents, there must be some valid theory positing a relationship between the two.⁷² Similarly, the number of regulations, standing alone, has no causal significance unless it can be shown to be a proxy for some *other* causal mechanism driving economic outcomes.

More sophisticated regulation counters have recognized the need for an explanatory construct to hypothesize causal relationships. However, the constructs they have supplied are poorly defined, under-theorized, and in tension with one another. It has been claimed that regulation counts operationalize constructs

-stream-does-the-fda-slow-medical-technology-innovation (comparing regulations to pebbles in a stream, which dam the stream when there are too many); Jared Meyer, *Regulation's Stranglehold on Millennials' Futures*, FORBES (May 25, 2015), <https://www.forbes.com/sites/jaredmeyer/2015/05/25/regulations-stranglehold-on-millennials-futures/#7cd2a62e2f39> (arguing that the "sheer quantity of government red tape" hampers economic growth); Will Yakowicz, *Why Regulation Is Ruining the U.S. Economy*, INC. (Nov. 19, 2013), <https://www.inc.com/will-yakowicz/why-regulation-is-ruining-us-economy.html> (suggesting the number of regulations, and removing unnecessary ones, will jumpstart the economy).

72. See Black et al., *supra* note 70, at 398 (asserting that even if independent variables are properly measured, causal claims can fail "because the underlying theory that posits a relationship between the general aspect (board structure) and the outcome is wrong").

like regulatory costs,⁷³ regulatory burdens,⁷⁴ or regulatory constraints,⁷⁵ or that they “probably capture[] at least some of regulation’s complexity.”⁷⁶ Rarely is it clear what the focal construct is, because these constructs have been used interchangeably.

This construct shell game severely undercuts the empirical validity of regulation counting studies because the different constructs do not necessarily mean the same thing. A burden, for instance, may not come in the form of economic costs. As discussed below, the costs of regulation may be to liberty or to the psychic well-being of regulated business owners. Costs that have big payoffs, like the expense of applying for an offshore drilling lease, are not properly characterized as burdens. Constraints—like requirements that everyone drive on the same side of the road—may not be particularly costly or burdensome or complex. Indeed, as this example illustrates, constraints often increase social welfare by solving collective action problems in ways that benefit everyone, including regulated businesses.⁷⁷ A world

73. See Exec. Order No. 13,771, 82 Fed. Reg. 9339 (Jan. 30, 2017); OMB GUIDANCE, *supra* note 2; BROOKINGS EVALUATION, *supra* note 29, at 6 (calling the 2-for-1 requirement “a blunt institutional reform to rein in regulatory costs”); Dudley, *supra* note 37, at 262 (suggesting an association between regulation counts and regulatory costs).

74. Dawson & Seater, *supra* note 5, at 143 (explaining their construct as follows: “It seems reasonable to suppose that the number of pages required to describe regulatory requirements varies directly with the number of requirements, at least on average. Our page count measure therefore should capture whatever regulatory burden is reflected in the number of regulatory requirements”); Andrew Hale, David Borys & Mark Adams, *Regulatory Overload: A Behavioral Analysis of Regulatory Compliance 2–5* (Mercatus Ctr., Working Paper No. 11-47, 2011) (citing the volume of regulations taken with their complexity and style to argue they create a regulatory overload that must be managed and adjusted); see also Tyler Cowen, *More Freedom on the Airplane, if Nowhere Else*, N.Y. TIMES (Nov. 17, 2013), <https://www.nytimes.com/2013/11/17/business/more-freedom-on-the-airplane-if-nowhere-else.html> (arguing that when there are more regulations, compliance for regulated entities becomes difficult and burdensome).

75. *RegData*, *supra* note 4, at 112; see also Mandel, *supra* note 71 (comparing regulations to pebbles in a stream, which, like a dam, constrain the flow when there are too many).

76. Dawson & Seater, *supra* note 5, at 139–40. Complexity is rarely cited as the focal construct explaining economic outcomes. Rather, complexity tends to be subsidiary to constructs like cost, which are ultimately said to drive economic outcomes.

77. See CASS R. SUNSTEIN, *AFTER THE RIGHTS REVOLUTION: RECONCEIVING THE REGULATORY STATE* (1990) (arguing that regulation often increases social welfare by solving collective action or coordination problems and by minimizing decision costs).

without traffic regulations would be a very costly place to conduct business. By contrast, clear-cut regulatory commands may not be especially complex, but might still be quite costly. For instance, the regulation requiring automakers to achieve a Corporate Average Fuel Economy rating of 54.4 miles per gallon by the year 2025 is reasonably straightforward as regulatory commands go, but many have claimed that it would be very costly for automakers and consumers.⁷⁸

In sum, each of the proffered constructs presents a different set of potential causal relationships with business activity and economic outcomes. Yet regulation counting studies have strenuously avoided tying regulation counts concretely to a single construct and theorizing the relationship between that particular construct and economic outcomes of interest. This may be because, as some regulation counters have acknowledged, economic theory would equally support a positive or a negative association between regulation and economic activity.⁷⁹ Or it may be because mutable constructs enhance the utility of regulation counts as a political tool, allowing regulation counters to speak to different audiences and deflect criticism by subtly shifting their rhetoric in response to challenges. If someone points out that regulations often save money, the political regulation counter can respond that the problem is really about stifling innovation or increasing complexity. If someone points out that regulations often spur innovation, the political regulation counter can respond that the real problem is cost. Whatever the reason, the lack of a well-defined, theoretically justified construct measured by regulation counts makes it implausible to draw causal inferences from any statistical associations found between these counts and economic outcome variables.

There is one dimension of regulation counting constructs that tends to be reasonably well defined, but it only further complicates the credible theorization of causal relationships between

78. Press Release, Office of the Press Sec'y, The White House, Obama Administration Finalizes Historic 54.5 MPG Fuel Efficiency Standards (Aug. 28, 2012), <https://obamawhitehouse.archives.gov/the-press-office/2012/08/28/obama-administration-finalizes-historic-545-mpg-fuel-efficiency-standard>; see also Juliet Eilperin & Steve Overly, *Automakers Ask EPA To Overturn Recent Review of Fuel-Efficiency Standards*, WASH. POST (Feb. 22, 2017), https://www.washingtonpost.com/national/health-science/automakers-ask-epa-to-overturn-recent-review-of-fuel-efficiency-standards/2017/02/22/81ad1398-f920-11e6-9845-576c69081518_story.html.

79. See, e.g., Dawson & Seater, *supra* note 5, at 145.

the regulation count and economic outcome variables. Regulation counters tend to agree that regulation counts are only meant to capture the costs or burdens or constraints impacting *private entities subject to regulation* rather than the aggregate net costs (or benefits or burdens or constraints) to society.⁸⁰ This conceptualization flies in the face of fundamental tenets of welfare economics and marginalism.⁸¹ The tally of gross costs on *one subset* of market actors reveals little about prices, behavior, or efficiency in the broader market. To date, regulation counters have not explicitly justified the theoretical significance of tallies measuring gross costs/burdens/constraints on one set of economic actors, unmitigated by benefits accruing to those same actors and divorced from their relationship to costs (and benefits) accruing to other market actors. Thus, it is not at all clear what construct regulation counters purport to measure when they measure costs, burdens, or constraints only on regulated entities, unless that construct is a select subset of the costs, burdens, or constraints borne by a favored set of political allies.

Thus, in addition to the more technical issues of measurement validity elaborated below, the opacity, indeterminacy, and outright bias in the overarching constructs purportedly measured by regulation counts undermine the ability of regulation counters to support causal empirical claims about the relationship between regulation counts and economic outcomes.

B. MEASURE VALIDITY

Even if a plausible theory to justify the constructs of cost, burden, or constraint on regulated entities could be developed, the problem remains that regulation counts do not validly measure said constructs. As I argue below, regulation counting does not and cannot measure the costs, burdens, or constraints on regulated entities because it does not account for at least nine important features of regulatory law: (1) variation in the weight of regulations; (2) variation in regulations' scope of coverage; (3) the object of regulatory requirements; (4) structural relationships between and among regulations; (5) basic grammar and punctuation; (6) the fact that many regulatory requirements relate to the dispensation of government largess to regulated entities; (7) the fact that regulated entities enjoy other monetizable benefits from robust regulation; (8) variations in the rigor with

80. See, e.g., *RegData*, *supra* note 4, at 112 (counting keywords in the C.F.R. that are likely to "limit choice sets" of economic actors).

81. BROOKINGS EVALUATION, *supra* note 29, at 5.

which regulations are enforced, up to and including total non-enforcement; and (9) the fact that Congress, and not the administering agency, is the direct source of many regulatory requirements.

To be fair, regulation counters have acknowledged the limitations of the measure to a point, but they tend to dismiss them casually. As one study explains, “[a] counting measure obviously is imperfect in that two identical values may comprise regulations of different types and, even within a given type, may represent regulations of different stringency.”⁸² But the authors dismiss this concern by noting that “if there are many kinds of regulation . . . , it is reasonable to expect an index to provide a useful overall measure of regulation.”⁸³ Of course, the validity of this claim depends on the contents of the index, and these authors display no understanding of the rudiments of regulatory law that comprise their index. Similarly, the authors of RegData allow that “just as one page [of the C.F.R.] may not be equal to another page [of the C.F.R.], one restriction may carry more consequence than another.”⁸⁴ Nonetheless, they suggest that this defect is mitigated by the fact that RegData measures restrictions of different weights at “different levels of granularity” (meaning by title, chapter, part, and paragraph of the C.F.R.), without explaining how measurement error nets out if measured at different levels.⁸⁵

Some regulation counters have dismissed criticism of their measure by arguing, circularly, that regulation counts *must* be a valid measure because they are correlated with macroeconomic outcome variables like growth and productivity, and there would be no correlation if the count variable were just noise.⁸⁶ This justification ignores the fact that it is trivially easy to generate spurious correlations using regression analysis:⁸⁷ for instance, the finding that between 2000 and 2009, per capita cheese consumption in the United States was highly correlated with the number

82. Dawson & Seater, *supra* note 5, at 139.

83. *Id.*

84. *RegData*, *supra* note 4, at 112.

85. *Id.*

86. Dawson & Seater, *supra* note 5, at 139.

87. See Atanasov & Black, *supra* note 15 (investigating shock-based causal inferences); Black et al., *supra* note 70 (demonstrating how easy it is to generate correlations through regression analysis).

of people who died by becoming tangled in their bedsheets.⁸⁸ Indeed, regulation counters have called into question the facial validity of their own measure by demonstrating in a recent study a spurious correlation between the number of pages in the *Federal Register* and the winning percentage of the Washington Redskins.⁸⁹

Despite recognizing the limitations of regulation counts as a measure, counters tend to conclude that these counts are a good-enough composite of something that is very difficult to measure. One of RegData's creators likens regulation counting to sabermetrics, an approach to baseball team management popularized by the movie *Moneyball* and my hometown team, the Oakland A's.⁹⁰ "When working with a complex system, whether it's the economy, or even a baseball team, it is important to measure its inputs and components if you want to advance the performance of that system. RegData is a new database that does just that."⁹¹

This Section challenges regulation counters' blithe dismissals of measurement criticism by demonstrating three key points. First, there is extreme incommensurability between different items that count the same in regulation counts. In sabermetrics terms, this would be like counting all hits the same, without respect to whether they are singles, doubles, triples or home runs or whether they occurred with runners in scoring position or during other key moments in the game. Sure, it's nice to know how many hits a player has in a season, but the point of sabermetrics is to predict the value that a player's hits are likely to add to the team over the course of a season and to help managers make decisions about which players to use in which situations in order to maximize that value. Sabermetrics attempts to achieve this goal by appropriately weighting and discounting different types of hits in different contexts.⁹² Like Sabermetrics, RegData is being marketed as a decision-making tool that can

88. Tyler Vigen, *Spurious Correlations*, TYLERVIGEN.COM, <http://www.tylervigen.com/spurious-correlations> (last visited Oct. 15, 2018).

89. See generally *Regulators and Redskins*, *supra* note 5.

90. Patrick McLaughlin, *The Science of Government Regulation*, U.S. NEWS (Oct. 31, 2012), <https://www.usnews.com/opinion/blogs/economic-intelligence/2012/10/31/the-science-of-government-regulation>.

91. *Id.*

92. See Zachary D. Rymer, *Sabermetrics for Dummies: How-to Guide for MLB Fans to Learn the Ropes*, BLEACHER REP. (Apr. 25, 2014), <https://bleacherreport.com/articles/2040748-sabermetrics-for-dummies-how-to-guide-for-mlb-fans-to-learn-the-ropes> (explaining sabermetrics for evaluating hitting, pitching, and player contributions to the team).

help government officials make complex calls about how to regulate;⁹³ but unlike Sabermetrics, RegData does not tell them whether any given regulation is a single, a double, or a home run, or whether it is likely to score a run, which is ultimately what matters at the end of the day.

Second, my analysis reveals rampant double (and triple, and more) counting of regulatory requirements. This means that even the absolute number counted is wrong. Third, my analysis demonstrates that the regulations counted are not only of different weight, but also of different directional effect. As demonstrated below, many regulations or regulatory commands *lessen* the costs, burdens, or constraints on regulated entities, and yet regulation counters *add* them to the tally of costs, burdens, or constraints on regulated entities rather than *subtracting* them from the count. This is more than mere noise—it affirmatively misrepresents the nature and magnitude of what is purportedly being measured. This type of measurement error does not net out as more data gets collected, like outlier games in a pitcher’s earned run average. Rather, it compounds itself. It is like adding every game a pitcher starts to the “win” column of her record without paying attention to the direction the game went. Regulation counters have never grappled seriously with the biases these defects introduce into their measures and any statistical analyses conducted using them, and the empirical claims arising from those analyses, cannot be taken seriously unless they do.

1. Counting Does Not Account for Weight

Regulation counts do not account for the weight of the things counted. This is a fundamental flaw if regulation counts are meant to measure regulatory costs, burdens, or constraints on regulated entities. The burden of carrying 1,000 feathers is very different from the burden of carrying 1,000 anvils, yet regulation counts make no attempt to differentiate between regulatory feathers and anvils. So, for example, in RegData the command that mine operators “*shall*” supply their official address and telephone number on documents submitted to the Mine Safety and Health Administration⁹⁴ is counted just the same as the command that automakers “*must* comply with”⁹⁵ the complex and

93. Cf. Patrick McLaughlin et al., *RegData 3.0 User’s Guide*, QUANTGOV, <https://quantgov.org/regdata/users-guide> (last visited Oct. 15, 2018) (discussing the potential uses for RegData and the sorts of problems it can help solve).

94. 30 C.F.R. § 41.30 (2017) (emphasis added).

95. 40 C.F.R. § 86.1818-12(a)(1) (2017) (emphasis added).

demanding greenhouse gas fleet average requirements detailed in EPA regulations. Adding these two wildly incommensurate requirements together does not provide an accurate measure of the costs, burdens, or constraints of regulation on regulated entities.

2. Counting Does Not Account for the Scope of Coverage

Regulation counts do not account for the breadth or narrowness in applicability of particular regulatory requirements. For instance, Subpart 3430 of the C.F.R. contains several regulatory requirements applicable to Preference Right Leases granted by the Bureau of Land Management for coal prospecting on federal lands.⁹⁶ However, these requirements apply only to leases issued prior to August 4, 1976.⁹⁷ Such leases represent roughly a third of federal coal prospecting leases.⁹⁸ Yet, mandatory terms identified in Subpart 3430 measure the same quantity of cost, burden, or constraint as those identified in Part 3470, which applies to all federal coal prospecting leases.⁹⁹

Some regulations apply to even smaller populations. For instance, Department of Justice (DOJ) regulations provide mandatory criteria that must be met to receive a financial reward for disclosing information relating to the unlawful introduction, manufacture, acquisition, export, loss, or diversion of atomic weapons and special nuclear materials.¹⁰⁰ These regulations contain directive language demanding that the information “*must* be original, and *must* concern”¹⁰¹ unlawful conduct. However, these mandates apply only to the thimble-full of individuals who possess information about unlawful activities relating to atomic weapons and who wish to obtain a financial reward for disclosing it to the DOJ.¹⁰² Nonetheless, RegData counts such narrowly ap-

96. See 43 C.F.R. pt. 3430, subpart 3430 (2017).

97. *Id.* § 3430.0.7.

98. *Frequently Asked Questions About the Federal Coal Leasing Program*, U.S. DEPT INTERIOR: BUREAU LAND MGMT., <https://eplanning.blm.gov/epl-front-office/projects/nepa/64842/78268/88489/CoalFAQ.pdf> (last visited Oct. 15, 2018).

99. See 43 C.F.R. § 3430.6-1 (“Each preference right lease shall be subject to the terms provided for Federal coal leases established in part 3470 of this title.”).

100. 28 C.F.R. § 13.6(a) (2017).

101. *Id.* (emphasis added).

102. *Id.* §§ 13.1–13.2.

plicable mandates as commensurate with, for instance, Occupational Safety and Health Administration requirements that apply to millions of U.S. workplaces.¹⁰³

3. Counting Does Not Account for the Object of Regulatory Requirements

Baked into the construct definition of most counting projects is the assumption that private regulated entities are the objects of regulatory mandates—that they are the actors bearing the costs, burdens, or constraints of regulation. However, large swaths of the C.F.R. do not even apply to regulated entities, but rather constrain the government’s actions, typically for the benefit and protection of regulated entities.

Title 1 regulates government actions relating to governmental functions like enacting and publishing laws. For example, it provides that certain specified documents “are *required* to be filed for public inspection with the Office of the Federal Register and published in the FEDERAL REGISTER”¹⁰⁴ and mandates that each document so published “*shall* be keyed to the Code of Federal Regulations.”¹⁰⁵ These regulations impose no burden whatsoever on regulated entities and, instead, require government transparency and regularity for the benefit of all citizens, including regulated entities and their lawyers.¹⁰⁶

The federal government is likewise the primary object of the regulatory constraints found in Title 2, administering government grants and agreements. For instance, Office of Management and Budget regulations require that granting agencies “*must* ensure” the adequacy of their information processing systems related to awards¹⁰⁷ and “*must* include” a variety of information about the award as well as instructions for applicants in all program announcements.¹⁰⁸ These regulations also contain detailed guidelines about the policies and procedures that agencies “[*m*]*ust* establish”¹⁰⁹ to govern debarment and suspension,

103. *Cf. supra* notes 56–59 and accompanying text (describing the counting methodology of RegData).

104. 1 C.F.R. § 5.2 (2017) (emphasis added).

105. *Id.* § 5.5 (emphasis added).

106. *Cf. id.* §§ 5.1–5.3 (laying out the policy and requirements behind the publication of documents in the FEDERAL REGISTER).

107. 2 C.F.R. § 25.215 (2017) (emphasis added).

108. *Id.* § 170.200(a) (emphasis added).

109. *Id.* § 180.25(a) (emphasis added).

including prohibiting agencies from making awards to suspended or debarred persons.¹¹⁰ Subpart B of Title 2 codifies regulations promulgated by thirty-two different agencies separately adopting the OMB guidance regulating grants and agreements, using similar mandatory language multiplied many times over.¹¹¹

Title 3, Chapter I, provides standards of conduct for employees in the Executive Office of the President.¹¹² Title 4, Chapter I, applies to the Government Accountability Office and contains thirty-six regulations using the word “must” and 148 regulations using the word “shall,” including requirements about the hours during which the GAO building “shall” be open to the public.¹¹³ Title 5 contains extensive regulation of administrative personnel, including 1,420 regulations using “shall” and 1,781 using “must.”¹¹⁴ Title 11 regulates federal elections.¹¹⁵ Regulations in Title 28, Chapter I, pertain exclusively to the Department of Justice and govern issues like parole, release, supervision and recommitment of prisoners,¹¹⁶ implementation of the Equal Access to Justice Act,¹¹⁷ and death sentence procedures.¹¹⁸ These regulations have no applicability whatsoever to regulated businesses, except perhaps to protect those that find themselves caught up in the federal criminal justice system. Title 39 applies exclusively to the Postal Service, and contains 610 regulations with “shall” and 227 with “must.”¹¹⁹ The regulations in 41 C.F.R. Sub-

110. *Id.* § 180.400.

111. *See Id.* §§ 200.100–113.

112. *E.g.*, 3 C.F.R. § 101.1 (2017) (stating that “[u]ntil further regulations are promulgated, the remainder of the entities within the Executive Office of the President, to the extent that 5 U.S.C. § 552 is applicable, *shall* follow the procedures set forth in the regulations applicable to the Office of Management and Budget (5 CFR Ch. III)” (emphasis added)).

113. 4 C.F.R. § 25.3 (2017) (“During normal working hours, the GAO Building *shall* be open to the public unless specific circumstances require it to be closed to the public to ensure the orderly conduct of government business.” (emphasis added)).

114. *E.g.*, 5 C.F.R. § 2638.306 (2017) (“The agency *must* provide each employee upon initial appointment to a supervisory position with the written information required under this section.” (emphasis added)).

115. 11 C.F.R. ch. I (2017).

116. 28 C.F.R. pt. 2.

117. *Id.* pt. 24.

118. *Id.* pt. 26.

119. *E.g.*, 39 C.F.R. § 447.21(b) (2017) (“No employee shall take sick leave to enable himself to engage in outside work.”).

title C relate to the government's management of its own property.¹²⁰ For instance, Section 102 of this subtitle contains mandates relating to the fuel economy standards of government vehicle fleets.¹²¹

In addition to government-focused regulations occupying large and discrete parts or titles of the C.F.R., agency-constraining regulations are woven throughout the agency-specific titles of the C.F.R. Extensive, agency-specific regulations bind agencies to observe certain procedures in order to comply with the Administrative Procedure Act,¹²² the Freedom of Information Act,¹²³ the Government in the Sunshine Act,¹²⁴ and due process requirements, thus effectuating important statutory and constitutional protections for regulated entities. Other regulatory mandates directed towards the government constrain agency discretion by specifying the factors an agency must consider in deciding certain issues. For instance, regulations implementing the Endangered Species Act contain requirements governing how the Secretary of the Interior "*shall* review" applications for exemptions from the statute's take provisions.¹²⁵

In addition, many federal regulatory mandates that arise in the context of cooperative federalism programs and block grant programs apply to state governments, not to private entities. For instance, 40 C.F.R. § 256.20 contains requirements applicable to state solid waste disposal programs.¹²⁶ Medicare and Medicaid regulations likewise impose extensive requirements on state governments that have elected to receive federal funding under these programs.¹²⁷

The failure to account for the fact that regulated entities are the object of only a fraction of the requirements found in the C.F.R. significantly distorts the accuracy of regulation counts as a measure of the cost, burden, or constraint of regulation on regulated entities.¹²⁸

120. 41 C.F.R. subtitle C (2017).

121. 41 C.F.R. § 102-34 (2017).

122. 5 U.S.C. §§ 500–96 (2017). For instance, in certain matters appealed to the Secretary of Commerce, the Secretary is required by regulation to provide public notice of the appeal, take comments, and evaluate the comments in specified ways. 15 C.F.R. § 930.128 (a)–(c) (2017).

123. 5 U.S.C. § 552.

124. *Id.* § 552b.

125. 50 C.F.R. § 451.02 (2017) (emphasis added).

126. 40 C.F.R. § 256.20 (2017).

127. 42 C.F.R. § 403.304 (2017).

128. While regulation counters may see regulations constraining federal and

4. Counting Does Not Account for Structural Relationships Among Regulations

Counting the absolute number of regulations or regulatory commands does not account for interrelationship between and among regulations and their subparts. Indeed, in many cases, the existence of multiple regulations or regulatory commands can result in fewer burdens and more flexibility for regulated entities. I identify four such cases below: exceptions, alternatives, reference to other regulations, and elaboration or clarification of regulatory requirements.

a. Exceptions

Many regulations containing regulatory commands are qualified by explicitly articulated exceptions. Some exceptions are so numerous or so broad that they swallow the rule. Yet regulation counters count these regulations or commands the same way that they count unqualified regulations or commands.¹²⁹

For instance, importers of agricultural products like dates can unilaterally exempt their products from USDA grade, size, quality, and maturity requirements in a variety of ways, including: by donating nonconforming products to “needy persons, prisoners, or Native Americans”¹³⁰ or by designating them for processing.¹³¹ Taking one of these unilateral actions alleviates date importers from the multiple mandatory requirements of 7 C.F.R. § 999.1.¹³² Similar exemptions are available for importers of walnuts,¹³³ prunes,¹³⁴ raisins,¹³⁵ and filberts.¹³⁶ The Nuclear Regulatory Commission exempts from classification as “fissile material” and compliance with associated regulatory requirements that fissile material which meets any one of six criteria.¹³⁷ The Federal Deposit Insurance Corporation exempts ten different

state government agencies as costly and burdensome as well, this relationship is nowhere theorized. Such a claim would need to be explicitly articulated and supported. In the absence of such support, it is impermissible to claim that the number of regulations on government entities accurately measures the costs, burdens, or constraints on regulated entities.

129. See, e.g., *supra* notes 56–59 and accompanying text.

130. 7 C.F.R. § 999.1(d)(2) (2017).

131. *Id.*

132. *Id.* § 999.1.

133. *Id.* § 999.100(d)(2).

134. *Id.* § 999.200(d).

135. *Id.* § 999.300(e).

136. *Id.* § 999.400(d).

137. 10 C.F.R. § 71.15 (2017).

types of advertisements from its requirements governing advertising by federally insured depository institutions.¹³⁸ The Department of Health and Human Services exempts several categories of health care providers from immunization reporting requirements.¹³⁹

Federal Trade Commission regulations allow “[a]ny person who believes a particular hazardous substance intended or packaged in a form suitable for use in the household or by children [to] be exempted from full label compliance otherwise applicable under the act”¹⁴⁰ upon a showing that “full compliance is impracticable or is not necessary for the protection of the public health.”¹⁴¹ While the Department of Homeland Security and the Coast Guard generally require inspected vessels to maintain life-saving systems with mandated features, vessels are exempt from these requirements if they can demonstrate that they would be “unreasonable or unnecessary”¹⁴² due to the nature of the vessel and its voyage routes or that they would “seriously impede research”¹⁴³ into novel vessel designs. Many research and development activities are similarly exempted from the disclosure requirements of the Toxic Substances Control Act.¹⁴⁴

Even where regulatory requirements are not explicitly qualified by exceptions in the text of the C.F.R., exceptions may be granted by administrative agencies under statutory authority and principles of “administrative equity.”¹⁴⁵ For example, the Department of Energy Act authorizes the Secretary of Energy to make “adjustments” to duly enacted regulations, including exceptions, exemptions, modifications, and interpretations.¹⁴⁶ Other statutes and regulations empower agencies to provide

138. 12 C.F.R. § 328.3(d) (2017).

139. 42 C.F.R. § 495.22 (2017).

140. 16 C.F.R. § 1500.82(a) (2017).

141. *Id.*

142. 46 C.F.R. § 199.20 (2017).

143. *Id.*

144. *E.g.*, 40 C.F.R. § 725.200 (2017) (exempting certain research and development activities from reporting requirements); *cf. id.* § 745.101 (exempting certain housing transactions from disclosure of potential lead-based paint exposure).

145. Alfred C. Aman, Jr., *Administrative Equity: An Analysis of Exceptions to Administrative Rules*, 1982 DUKE L.J. 277, 278 (1982).

146. 42 U.S.C. § 7194(a) (2017).

waivers,¹⁴⁷ no-action letters,¹⁴⁸ or variances¹⁴⁹ that carve out exceptions to regulatory requirements on a case-by-case basis.

Regulation counts take no account of this. While the existence of exceptions may, admittedly, add complexity to regulatory regimes, this type of complexity ultimately alleviates costs/burdens/constraints on regulated entities, and thus cannot merely be added to a tally that purports to measure any of these constructs.

b. Alternatives

Some regulations contain multiple alternative means of complying with primary statutory or regulatory requirements. For instance, in the quoted regulation FERC gives covered facilities options as to how they will deliver and price energy:

Each qualifying facility *shall* have the option either: (1) To provide energy as the qualifying facility determines such energy to be available for such purchases, in which case the rates for such purchases *shall* be based on the purchasing utility's avoided costs calculated at the time of delivery; or (2) To provide energy or capacity pursuant to a legally enforceable obligation for the delivery of energy or capacity over a specified term, in which case the rates for such purchases *shall*, at the option of the qualifying facility exercised prior to the beginning of the specified term, be based on either: (i) The avoided costs calculated at the time of delivery; or (ii) The avoided costs calculated at the time the obligation is incurred.¹⁵⁰

While covered facilities need only select *one* of the options presented in this regulation, and thus will be subject to only one mandate, the text of the regulation contains *three* mandatory search terms.

Similarly, regulations sometimes give regulated entities the option to consolidate regulatory requirements. For instance, 43 C.F.R. § 3430.3-2 allows those holding preferential leases for

147. See, e.g., 47 U.S.C. § 203(b)(2) (2017) (“The [Federal Communications] Commission may, in its discretion and for good cause shown, modify any requirement made by or under the authority of this section either in particular instances or by general order applicable to special circumstances or conditions . . .”).

148. See, e.g., 17 C.F.R. § 200.81 (2017) (setting forth procedures for obtaining a no-action letter from the Securities and Exchange Commission).

149. See, e.g., 29 U.S.C. § 665 (2017) (authorizing the Secretary of Labor to grant exceptions to occupational safety and health regulations as follows: “The Secretary, on the record, after notice and opportunity for a hearing may provide such reasonable limitations and may make such rules and regulations allowing reasonable variations, tolerances, and exemptions to and from any or all provisions of this chapter as he may find necessary and proper to avoid serious impairment of the national defense”).

150. 18 C.F.R. § 292.304(d) (2017) (emphasis added).

coal prospecting on BLM lands to satisfy two environmental impact assessment requirements with a single analysis:

(a) After the applicant has completed the initial showing *required* under § 3430.2 of this title, the authorized officer *shall* conduct an environmental analysis of the proposed preference right lease area and prepare an environmental assessment or environmental impact statement on the application. (b) The environmental analysis may be conducted in conjunction with and included as part of the environmental impact statement *required* for coal activity planning under § 3420.3-4 of this title.¹⁵¹

This regulation is meant to convey that two regulatory requirements can be satisfied by one action. However, it employs three string terms to communicate that flexibility.

Alternatives like these are meant to provide regulated entities with choice and flexibility. Regulated entities need only comply with one, not all, of the alternatives. The more alternatives there are, the less onerous the regulation typically is, but a count of regulatory mandates indicates precisely the opposite.

c. Reference to Other Regulations

Many regulations containing restrictive language do not contain any new restrictions, but merely reference other regulations. For instance, regulations governing recordkeeping by railroads provide:

(a) For purposes of compliance with the recordkeeping requirements of this part, except for the daily inspection record maintained on the locomotive *required* by § 229.21, the cab copy of Form FRA F 6180-49-A *required* by § 229.23, the fragmented air brake maintenance record *required* by § 229.27, and records *required* under § 229.9, a railroad may create, maintain, and transfer any of the records *required* by this part through electronic transmission, storage, and retrieval provided that all of the requirements contained in this section are met.¹⁵²

Although the word “required” is used five times in this provision, it does not contain five distinct requirements. Rather, it contains one new requirement and merely references requirements contained in four other sections (presumably already counted there). The provision includes these references to weave together multiple, related code provisions so that regulated entities have a coherent roadmap to the regulatory scheme. But for purposes of the regulation count, the provision is charged with five mandates rather than one.¹⁵³

151. 43 C.F.R. § 3430.3-2 (2017) (emphasis added).

152. 49 C.F.R. § 229.20 (2017) (emphasis added).

153. See *supra* notes 56–59 and accompanying text.

d. Clarification of Legal Requirements

Many regulations are promulgated to explain with greater specificity the meaning of broad, vague legal requirements found in statutes or in other regulations. Such elucidation of legal requirements is meant to provide clarity and certainty in application of the law so that regulated entities understand whether the law applies to them and what they must do to comply.¹⁵⁴ Notably, agencies typically are not under any obligation to promulgate clarifying regulations. Agencies with delegated enforcement power are at liberty to enforce statutory law against regulated entities without any guidance or elaboration whatsoever.¹⁵⁵ The promulgation of clarifying regulations is premised on the intuition that regulated citizens are better off when they know how the agency interprets and plans to apply the law “than if they are remitted to the discretion of local agents and to ‘secret law.’”¹⁵⁶ Indeed, regulated entities often request agencies to issue clarifying regulations or other guidance.¹⁵⁷ In a survey of regulated entities and their attorneys, one respondent noted: “It’s not the number of regulations that is the problem; it’s the inability to understand how they apply to a specific situation that is the problem. In that analysis, more regulations—and

154. Regulation counters admit that clarity is valuable. Clyde Wayne Crews, the perennial author of *Ten Thousand Commandments*, stated in a memo to the House Oversight and Government Reform Committee that unclear regulations prevent businesses from planning. *Regulatory Reform Task Force Check-In: Hearing Before the Subcomm. on Health Care, Benefits, & Admin. Rules & Subcomm. on Gov’t Operations of the H. Comm. on Oversight & Gov’t Reform*, 115th Cong. (2017) (statement of Clyde Wayne Crews Jr., Vice President for Policy, Competitive Enterprise Institute) (Oct. 27, 2017), <https://oversight.house.gov/wp-content/uploads/2017/10/Wayne-Crews-Regulatory-Reform-Task-Force-Testimony-10242017.pdf>.

155. See *NLRB v. Bell Aerospace Co.*, 416 U.S. 267, 292 (1974); *SEC v. Chenery Corp.*, 332 U.S. 194, 201 (1947) (holding that the SEC had a duty to enforce standards governing management trading during a reorganization “regardless of whether those standards previously had been spelled out in a general rule or regulation”).

156. Strauss, *supra* note 5, at 808.

157. Ruhl & Salzman, *supra* note 5, at 785; Strauss, *supra* note 5, at 805 (describing how license applicants routinely asked the Nuclear Regulatory Commission to clarify which technical designs would satisfy the performance standards in the regulations); cf. Seth D. Rothman & Jessica Studness, *FDA Faces Uncertainty Implementing 21st Century Cures Act*, LAW360 (Mar. 15, 2017), <https://www.law360.com/articles/900882/fda-faces-uncertainty-implementing-21st-century-cures-act> (describing how the FDA regularly issues guidance to clarify its regulations).

more specific examples of how they apply—actually might be a good thing.”¹⁵⁸

For instance, agencies often issue regulations clarifying their interpretation of vague statutory terms. A prominent example is the U.S. Army Corps of Engineers’ (Army Corps) and the EPA’s “Waters of the U.S. Rule” (WOTUS rule).¹⁵⁹ The Clean Water Act (CWA), by its terms, protects “navigable waters,” which the statute defines as “the waters of the United States, including the territorial seas.”¹⁶⁰ Waters that fall within this statutory definition are protected by extensive statutory requirements, including standards, discharge limitations, permitting, and enforcement.¹⁶¹ Waters that fall outside this statutory definition are not protected by these statutory requirements. Understanding the precise coverage of the statutory term “waters of the United States” is critical to knowing which activities will be covered by CWA requirements and which will not, and thus, to providing certainty in planning for those with potentially covered projects. Unfortunately, the statutory terms selected by Congress are notoriously ambiguous.¹⁶² Consequently, the Army Corps and EPA have endeavored through rulemaking to clarify the definition of the statutory terms.¹⁶³

While there is ongoing controversy about the proper scope of the WOTUS Rule,¹⁶⁴ since 1992, all current, former, and proposed versions of the rule have excluded “prior converted

158. Ruhl & Salzman, *supra* note 5, at 783 n.85. In a 2014 case study of New Brunswick and Maine landowners, findings suggested that property owners from both locales were “comfortable with most regulations and many agreed that a combination of incentives and regulations are in fact useful.” Michael R. Quartuch & Thomas M. Beckley, *Carrots and Sticks: New Brunswick and Maine Forest Landowner Perceptions Toward Incentives and Regulations*, 53 ENVTL. MGMT. 202, 202 (2014).

159. 33 C.F.R. § 328.3 (2017).

160. 33 U.S.C. § 1362(7) (2017).

161. *See* 33 U.S.C. ch. 26.

162. *See, e.g.*, *Rapanos v. United States*, 547 U.S. 715 (2006) (plurality opinion) (defining “navigable waters” differently from Justice Kennedy’s concurring opinion in the same case, setting up a circuit split over the proper definition of the term).

163. *Cf. Supplemental Notice: Definition of “Waters of the United States” - Recodification of Preexisting Rule*, EPA.GOV, <https://www.epa.gov/wotus-rule/supplemental-notice-definition-waters-united-states-recodification-preexisting-rule> (last updated July 12, 2018) (seeking comments on a proposed rulemaking to repeal the current WOTUS definition while agencies continue to work on a new definition).

164. In a 2014 proposed rule issued by the U.S. EPA, over one million comments were received. Dorothy Noble, *WOTUS Backstory: Waters of the United States Debate Continues*, FARMING MAG. (Feb. 5, 2015), <https://web.archive.org/>

cropland”¹⁶⁵ from CWA coverage.¹⁶⁶ Prior converted croplands are wetlands altered prior to 1985 to make crop production possible.¹⁶⁷ The scope of the exception is defined in mandatory terms, including the criteria by which prior converted croplands “shall be identified.”¹⁶⁸ These regulations articulate a deregulatory interpretation of the CWA that is tremendously important to the agricultural industry. The administering agencies are under no obligation to interpret the statute in this way or to provide codified guidance of this interpretation.

The agencies could simply proceed with CWA enforcement actions against those farmers they believe fall under some unstated, possibly dynamic, definition of “waters of the United States” and support application of the statute on a case-by-case basis in adjudications or court proceedings.¹⁶⁹ Enforcement targets might or might not include those farming converted wetlands, as they are not explicitly excluded from CWA coverage by statute.¹⁷⁰ It is difficult to see how this clarifying regulation—

web/20150905080533/https://www.farmingmagazine.com/voices/wotus-backstory-waters-of-the-united-states-debate-continues. At one point, the EPA’s website allegedly included an “extensive list of organizations and individuals that have requested clarification of ‘Waters of the U.S.’” via rulemaking. *Id.* During the beginning of his presidency, President Trump issued EO 13,778, which orders the EPA to review, and rescind or revise the WOTUS rule, and all executive departments and agencies to review, and rescind or revise all “orders, rules, regulations, guidelines, or policies implementing or enforcing the final rule.” Exec. Order No. 13,778, 82 Fed. Reg. 12,497, 12,497 (Feb. 28, 2017). The Order further explains that a new proposed rule “shall consider” interpreting the term consistent with Justice Scalia’s opinion in *Rapanos*, 547 U.S. 715. *Id.* The Order claims that such changes will “[r]estor[e] the [r]ule of [l]aw, [f]ederalism, and [e]conomic [g]rowth.” *Id.*

165. See *Current Implementation of “Waters of the United States”*, EPA.GOV, <https://www.epa.gov/wotus-rule/about-waters-united-states> (last updated Sept. 18, 2018) (stating pointblank that “‘Waters of the United States’ do not include prior converted cropland”). Compare 7 C.F.R. § 12.33 (2011) (exempting from regulation the production of agricultural commodities on land deemed to be prior converted cropland), with 7 C.F.R. § 12.33 (2017) (same).

166. Kristine A. Tidgren, *Prior Converted Cropland: A 2015 Review*, IOWA ST. U. CTR. FOR AGRIC. L. & TAX’N (Aug. 27, 2015), <https://www.calt.iastate.edu/article/prior-converted-cropland-2015-review>; see also *Current Implementation of “Waters of the United States,” supra* note 165.

167. 7 C.F.R. § 12.2.

168. *Id.* § 12.32(a) (emphasis added).

169. See *NLRB v. Bell Aerospace Co.*, 416 U.S. 267 (1974) (addressing arguments made in *SEC v. Chenery Corp.*, 332 U.S. 194 (1947)); *Chenery*, 332 U.S. at 203 (holding agencies may decide statutory standards and issues on a case-by-case basis).

170. Michelle R. McKown, *A Wetland by Any Other Name: Where Does Federal Jurisdiction Apply?*, GPSOLO, May/June 2016, at 48, 52.

that notifies large numbers of regulated entities whether (or not) the administering agencies consider their activities to be subject to CWA requirements¹⁷¹—imposes costs, burdens, or constraints on them. Nonetheless, in calculating the costs, burdens, and constraints on regulated entities, regulation counters count commands clarifying existing legal requirements the same as commands imposing new requirements.

5. Counting Does Not Account for Basic Grammar and Punctuation

a. *Counting Does Not Account for the Negation of Mandates*

RegData's mandate counts are tallied without attention to the most basic grammatical context in which the search terms are embedded. Many mandatory terms in the C.F.R. are explicitly negated by words like no or not. For instance, 40 C.F.R. § 232.2, which governs the environmental impacts of pilings placed in the waters of the United States, provides: "(2)(i) Placement of pilings in waters of the United States that does not have or would not have the effect of a discharge of fill material *shall not* require a Section 404 permit."¹⁷² Regulation counters count the shall without respect to the not that exempts certain pilings from the Section 404 permitting process.¹⁷³ Not only is 40 C.F.R. § 232.2 not a burden on those placing pilings, but, in fact, it relieves them of the burdens imposed by another regulation.¹⁷⁴ Similarly, 18 C.F.R. § 292.309 relieves electric utilities of certain obligations after a specified date, stating that if certain conditions are met, they "*shall not be required*, under this part, to enter into a new contract or obligation to purchase electric energy from a qualifying cogeneration facility or a qualifying small power production facility."¹⁷⁵ Instead of construing this regulation properly as a relief of regulatory burden, RegData counts it as a double-burden, because it contains two mandatory search terms.¹⁷⁶

b. *Counting Does Not Account for Punctuation*

Some portions of the C.F.R. are phrased in "Question & Answer" format to make regulatory requirements more accessible

171. See 40 C.F.R. § 230 (2017).

172. *Id.* § 232.2 (emphasis added).

173. See *supra* notes 56–59 and accompanying text.

174. 40 C.F.R. § 232.2.

175. 18 C.F.R. § 292.309(a) (2017) (emphasis added).

176. See *supra* notes 56–59 and accompanying text.

to lay readers. As a result, the text of the C.F.R. is littered with questions, many of which include mandatory language.¹⁷⁷ At the very least, counting mandatory terms in both questions and answers double-counts the number of mandates. Worse, however, it ignores the substance of the answer. For instance, 41 C.F.R. § 302–2.17 asks: “*Must* I sign a service agreement for a ‘last move home’ relocation?”¹⁷⁸ It turns out that the answer is: “*No*, you do not need to sign a service agreement for a ‘last move home’ relocation.”¹⁷⁹ Similarly, 41 C.F.R. § 302–12.9 inquires: “If my agency authorizes me to enter a homesale program, *must* I accept a buyout offer from the relocation services company?”¹⁸⁰ Again, the answer is: “*No*, if your agency authorizes you to enter a homesale program, your agency must give you the option to accept or reject an offer from the relocation services company.”¹⁸¹ RegData counts mandatory language embedded in questions without bothering to learn the answers.

6. Counting Counts Conditional Benefits as Burdens

Many regulations set forth criteria and procedures for obtaining valuable benefits from the federal government, including grants, loans, leases, and entitlements.¹⁸² When the federal government elects to provide scarce resources to citizens, it allocates them among applicants conditioned upon mandatory, rule-based criteria. These rules need not be followed by citizens who do not seek the government benefit. Those who elect to follow the rules so that they may receive the benefit cannot properly be characterized as burdened or constrained by their choice.¹⁸³

Mandatory conditions are attached to government funding in the form of loans and grants. For instance, electric utilities wishing to obtain loans from the Rural Utilities Service “shall” meet conditions relating to the construction of transmission

177. See *infra* notes 178–81.

178. 41 C.F.R. § 302-2.17 (2018) (emphasis added).

179. *Id.* (emphasis added).

180. *Id.* § 302-12.9 (emphasis added).

181. *Id.* (emphasis added).

182. See, e.g., *infra* notes 184–86.

183. This assertion should not be taken as an endorsement of the “bitter with the sweet” doctrine. See *Arnett v. Kennedy*, 416 U.S. 134, 153–54 (1974) (plurality opinion). Rather, it is an empirical claim that regulations of the type described in this paragraph are not properly characterized as costs, burdens, or constraints on regulated entities.

lines.¹⁸⁴ All others may ignore these commands. Similarly, researchers who wish to apply for a federal grant to study the protection and conservation of marine mammals “shall” comply with numerous requirements.¹⁸⁵ Those who do not study marine mammals, or who do so without federal funding, need not.

The government also attaches mandatory conditions to the grant of federal land use rights. The Bureau of Ocean Energy Management (BOEM), for instance, grants mineral leases for oil and gas exploration and development in federal waters off the coast of the United States based on authority delegated by the Outer Continental Shelf (OCS) Lands Act.¹⁸⁶ These lease rights are extraordinarily valuable, accounting for seven percent of U.S. natural gas production and twenty-four percent of U.S. oil production.¹⁸⁷ To obtain OCS lease rights, an applicant must meet multiple mandatory conditions and follow multiple mandatory procedures.¹⁸⁸ However, not one of these requirements applies to anyone who is not seeking to obtain a lucrative OCS lease from the federal government. Related regulations provide OCS lease applicants the additional benefit of appealing adverse decisions by state agencies denying them permits for offshore oil and gas development.¹⁸⁹ Prospective OCS licensees must satisfy numerous requirements to have their appeals heard by the Interior Board of Land Appeals.¹⁹⁰ However, the appeals procedures provide applicants a valuable avenue for getting their oil and gas projects federally approved despite state opposition. These appeals-related requirements can hardly be characterized as costs, burdens, or constraints on regulated entities.

The federal organic labeling program similarly provides lucrative business opportunities for participants. In 2015, U.S. organic sales reached a record-high \$43.3 billion.¹⁹¹ This sales total represented growth of “a robust 11 percent from the previous

184. 7 C.F.R. § 1726.77 (2017).

185. 50 C.F.R. § 82.8 (2017).

186. 30 C.F.R. §§ 550.101, 550.200–.204 (2017).

187. BUREAU OF OCEAN ENERGY MGMT., OIL AND GAS LEASING ON THE OUTER CONTINENTAL SHELF, https://www.boem.gov/uploadedfiles/boem/oil_and_gas_energy_program/leasing/5boemre_leasing101.pdf (last visited Oct. 15, 2018).

188. See 30 C.F.R. §§ 550.200–.262.

189. See 15 C.F.R. §§ 930.120–.131 (2017).

190. 30 C.F.R. § 550.235.

191. Maggie McNeil, *U.S. Organic Sales Post New Record of \$43.3 Billion in 2015*, ORGANIC TRADE ASS'N (May 19, 2016), <https://www.ota.com/news/press-releases/19031>.

year's record level and far outstripping the overall food market's growth rate of 3 percent."¹⁹² Those wishing to access the organic market must comply with extensive regulatory requirements and prohibitions.¹⁹³ Those who do not, need not. Neither group of businesses can properly be said to be burdened or constrained.

The foregoing examples focus on regulations that distribute government benefits to businesses based on mandatory criteria, because they most starkly demonstrate the distortions created by counting such regulations as costs, burdens, or constraints on regulated businesses. It bears notice that large portions of the C.F.R. set forth mandatory criteria for *individuals* to obtain government benefits like Social Security Disability Insurance,¹⁹⁴ Medicaid,¹⁹⁵ Veterans' benefits,¹⁹⁶ or welfare assistance¹⁹⁷—many of them quite onerous. The regulations implementing the Temporary Assistance for Needy Families program, for instance, mandate that “[a] parent or caretaker receiving assistance must engage in work activities when the State has determined that the individual is ready to engage in work or when he or she has received assistance for a total of 24 months.”¹⁹⁸ Such regulatory mandates do, indeed, “limit choice sets,”¹⁹⁹ in the preferred parlance of regulation counters, but it is difficult to see how they do so in ways that contribute to costs, burdens, or constraints on regulated entities or how these individual burdens might be causally related to macroeconomic outcomes.

In each of the above contexts, and many more, a business that wishes to obtain valuable benefits that the government has voluntarily elected to provide must adhere to certain requirements. All others are completely free to forego the benefit and ignore the requirements. Regulation counts ignore the fact that many regulatory commands are means of providing funding and market opportunities to regulated businesses rather than imposing costs, burdens, or constraints on them.

192. *Id.*

193. *E.g.*, 7 C.F.R. § 205.236 (2017).

194. *See* 20 C.F.R. ch. III (2017).

195. *See* 42 C.F.R. ch. IV (2017).

196. *See* 38 C.F.R. ch. I (2017).

197. 24 C.F.R. § 5.609 (2017).

198. 45 C.F.R. § 261.10(a)(1) (2017).

199. *RegData*, *supra* note 4, at 112.

7. Counting Does Not Account for the Benefits of Regulation to Regulated Entities

Much has been made of the failure of counting to account for the benefits of regulation to society,²⁰⁰ and certainly this is problematic from the perspective of economic theory. However, even if one were to accept the dubious premise that there is some theoretically coherent reason to count only costs to regulated entities, it is not clear why one would not net-out from those costs the measurable benefits that regulated entities themselves receive from regulation. There is empirical evidence from certain contexts that regulated entities benefit from robust regulation. For instance, a rigorous experimental study shows that workplace health and safety inspections conducted by a state agency not only reduced worker injuries, but also reduced the direct and indirect costs of these injuries to employers, including workers' compensation expenditures and lost workdays, with no detectable job loss.²⁰¹ Studies of securities regulation have revealed that "higher enforcement intensity gives the U.S. economy a lower cost of capital and higher securities valuations"²⁰² than countries where enforcement is more lax, collectively benefiting U.S.-listed companies, particularly smaller firms.²⁰³

These studies suggest that regulated entities may accrue measurable financial benefits, both individually and collectively, from being regulated.²⁰⁴ In these cases, the costs of regulation might be viewed as a kind of investment that pays returns directly to the investor. Admittedly, this raises questions about

200. See, e.g., Cecot & Livermore, *supra* note 3, at 3 ("We conclude that the Order is not calibrated to maximize social welfare because it narrowly focuses on the costs of regulation to regulated entities and fails to acknowledge the benefits of regulation."); *Capping Regulation*, *supra* note 3, at 5 (suggesting that it would be irrational not to consider net benefits to "distinguish a good rule from a bad rule"); Lubbers, *supra* note 43, at 8 (asserting that the "overall main shortcoming" of EO 13,771 is "that it does not account for the benefit of regulations at all"); Freeman, *supra* note 43 (arguing that EO 13,771 would "strangle even the most beneficial rules under the guise of cutting red tape").

201. See generally David I. Levine, Michael W. Toffel & Matthew S. Johnson, *Randomized Government Safety Inspections Reduce Worker Injuries with No Detectable Job Loss*, 336 SCI. 907 (2012).

202. John C. Coffee, Jr., *Law and the Market: The Impact of Enforcement*, 156 U. PA. L. REV. 229, 230 (2007).

203. See generally Douglas Cumming, April Knill & Nela Richardson, *Firm Size and the Impact of Securities Regulation*, 43 J. COMP. ECON. 417 (2015) (discussing effects of public and private enforcement relative to firm size).

204. See Coffee Jr., *supra* note 202; Cumming et al., *supra* note 203; Levine et al., *supra* note 201.

whether regulated entities receive a good return on their investments. But these are very different questions than regulation counters purport to ask and answer. Their tallies omit regulatory returns entirely and thus distort the magnitude and nature of the costs, burdens, and constraints of regulation on regulated entities.

8. Counting Does Not Account for Enforcement Levels

It has long been recognized that “it is legal rules and their enforcement that *together* shape the incentives”²⁰⁵—i.e. costs—that regulated entities face. Regulations are enforced with widely varying degrees of stringency and frequency: some are enforced vigorously and regularly, others are enforced with moderate stringency or only sporadically, and many are not enforced at all.²⁰⁶ At the far end of this continuum are regulations like the detailed licensing requirements found in “Public Health and Environmental Radiation Protection Standards for Yucca Mountain, Nevada,”²⁰⁷ which have laid dormant since this designated nuclear waste disposal site was shut down in 2010.²⁰⁸

Even in the normal course, administrative agencies have severe resource constraints that make it impossible to vigorously enforce all regulations at all times. While environmental, health, and safety regulations are often cited as among the most burdensome, the budget and staffing levels of health and safety agencies substantially inhibit their ability to enforce these requirements.²⁰⁹ It has been reported, for instance, that it would take the Occupational Safety and Health Administration’s staff of around 2400 inspectors more than ninety years to conduct even cursory inspections of all eligible workplaces in the state of Texas alone.²¹⁰ Such extraordinary resource constraints require

205. Cento G. Veljanovski, *The Economics of Regulatory Enforcement*, in ENFORCING REGULATION, 171, 171 (Keith Hawkins & John M. Thomas eds., 1984) (emphasis added).

206. See, e.g., *id.* at 172 (describing different forms of regulation enforcement).

207. 40 C.F.R. pt. 197 (2017).

208. Mike M. Ahlers, *Yucca Mountain Project Setup Took Years; Shutdown Taking Only Months*, CNN (May 10, 2011), <http://www.cnn.com/2011/US/05/10/yucca.mountain.shutdown/index.html>.

209. See Bridget M. Hutter & Sally Lloyd-Bostock, *Risk, Interest Groups and the Definition of Crisis: The Case of Volcanic Ash*, 64 BRIT. J. SOC. 383, 399–400 (2013); Bridget M. Hutter, *Variations in Regulatory Enforcement Styles*, 11 LAW & POL’Y 153, 164–65 (1989).

210. Peter Dreier & Donald Cohen, *The Texas Fertilizer Plant Explosion Wasn’t an Accident*, HUFFPOST: BLOG (June 4, 2013, 2:34 PM), <https://www>

agencies to prioritize enforcement in particular areas and deprioritize enforcement in other areas.²¹¹

In addition to resource-based prioritization, enforcement priorities change with presidential administrations as different chief executives with different policy priorities take office.²¹² It has been reported, for instance, that the Securities and Exchange Commission sharply curtailed enforcement activities against publicly traded companies and their subsidiaries during the first six months of SEC Chairman Jay Clayton's tenure.²¹³ In the first year of the Trump administration, several agencies announced that they would suspend enforcement of certain regulations.²¹⁴

.huffingtonpost.com/peter-dreier/texas-fertilizer-plant-explosion_b_3384739.html.

211. *See id.*

212. For instance, in March 2017, the Federal Motor Carrier Safety Administration announced that it was suspending enforcement of mandated break and hours-of-service rules for commercial truck drivers designed to prevent driver fatigue and associated accidents. *See* Nat'l Safety Council, *FMCSA Scraps Requirement for Overnight Rest Breaks for CMV Drivers*, SAFETY + HEALTH MAG. (Mar. 14, 2017), <https://www.safetyandhealthmagazine.com/articles/15419-fmcsa-scraps-requirement-for-overnight-rest-breaks-for-cmv-drivers>; *see also* Hours of Service of Drivers: Notice of Suspension of Enforcement, 79 Fed. Reg. 76,241 (Dec. 22, 2014) (providing notice of suspension of enforcement in 2014).

213. URSKA VELIKONJA, BEHIND THE ANNUAL SEC ENFORCEMENT REPORT: 2017 AND BEYOND 9 (Nov. 19, 2017), <https://ssrn.com/abstract=3074073>.

214. For instance, in August of 2017, Neomi Rao, Administrator of OIRA issued a memo to the Chair of the Equal Employment Opportunity Commission expressing the review and immediate stay of EEO-1. Memorandum from Neomi Rao, Adm'r, Office of Info. & Regulatory Affairs to Victoria Lipnic, Acting Chair, Equal Emp't Opportunity Comm'n (Aug. 29, 2017), https://www.reginfo.gov/public/jsp/Utilities/Review_and_Stay_Memo_for_EEOC.pdf. This suspends the requirement to report salary data by gender, ethnicity, and race. *Id.* Rao argues that such reporting lacks "practical utility, [is] unnecessarily burdensome, and do[es] not adequately address privacy and confidentiality issues." *Id.*; *see also* Stephen Miller, *White House Suspends Pay-Data Reporting on Revised EEO-1 Form*, SOC'Y FOR HUM. RESOURCE MGMT. (Aug. 31, 2017), <https://www.shrm.org/resourcesandtools/hr-topics/compensation/pages/revised-eeo-1-form-suspended.aspx> (reporting the stay of the revised provisions of the EEO-1 form). The EPA attempted to impose a two-year moratorium on the Obama-era fugitive emission of methane rule, which restricts methane emissions from oil and gas industries. *See* *Clean Air Council v. Pruitt*, 862 F.3d 1, 5 (D.C. Cir. 2017). However, the effort was disrupted when the D.C. Circuit held that the delay is "tantamount to amending or revoking a rule" and the CAA does not authorize the stay of any of the provisions. *Id.* at 6; *see also* Lisa Friedman, *Court Blocks E.P.A. Effort to Suspend Obama-Era Methane Rule*, N.Y. TIMES (July 3, 2017), <https://www.nytimes.com/2017/07/03/climate/court-blocks-epa-effort-to-suspend-obama-era-methane-rule.html> (reporting the D.C. Circuit Court's holding in *Pruitt*).

Agencies also sometimes suspend enforcement of regulations while they reconsider them in light of changed circumstances or new evidence. For instance, the Federal Motor Carrier Safety Administration announced that it was suspending enforcement of a rule that mandated breaks and hours-of-service restrictions for commercial truck drivers after receiving the results of a study showing that the rule did nothing to prevent driver fatigue and associated accidents.²¹⁵

The upshot of all this is that, at any given moment in time, only a subset of regulations on the books is being actively enforced against regulated entities. Regulation counts make no effort to ascertain which regulatory mandates are lying dormant due to non-enforcement, and thus not imposing costs, burdens, or constraints on anyone—except, perhaps, the beneficiaries of unenforced legal rights²¹⁶ or society at large.²¹⁷ Thus, counts that include unenforced regulations, as they all do, overstate the cost, burden, and constraint of regulation on regulated entities.

9. Counting Does Not Account for the Source of Regulatory Requirements

Many regulations repeat verbatim (or nearly so) language from the statute authorizing them. Agencies draft such regulations for convenience, so that all the key rules in a regulatory scheme can be found in one place and to avoid the interpretive confusion and inconsistencies that might be created by paraphrasing rather than reproducing statutory requirements. The

215. See Notice of Suspension of Enforcement, 79 Fed. Reg. 76,241 (Dec. 22, 2014); James Jaillet, *Current 34-Hour Restart Regs to Stay Put Following Issuance of Long-Awaited FMCSA Report*, CCG (Mar. 6, 2017), <https://www.ccdigital.com/34-hour-restart-regs-to-stay-put-following-issuance-of-long-awaited-fmcsa-report> (describing the Department of Transportation study prompting the removal of the rules).

216. See, e.g., Ben Depoorter & Stephan Tontrup, *The Costs of Unenforced Laws: A Field Experiment* (N.Y. Univ. Pub. Law & Legal Theory, Working Paper No. 557, 2016) (finding that individuals granted a right to be free from second-hand smoke suffer a psychological cost when these rights are unenforced even when they are indifferent to the material consequences of second-hand smoke).

217. See, e.g., Utpal Bhattacharya & Hazem Daouk, *The World Price of Insider Trading*, 57 J. FIN. 75 (2002) (finding that non-enforcement of insider trading laws results in higher costs of capital in developing countries); Raymond Fisman & Edward Miguel, *Corruption, Norms, and Legal Enforcement: Evidence from Diplomatic Parking Tickets*, 115 J. POL. ECON. 1020 (2007) (finding a correlation between unenforced parking laws and corruption norms); Ryan Goodman, *Beyond the Enforcement Principle: Sodomy Laws, Social Norms, and Social Panoptics*, 89 CAL. L. REV. 643 (2001) (reporting that unenforced sodomy laws in South Africa created a climate of suspicion and surveillance).

U.S. Supreme Court has termed this practice “parroting” and denies agencies the heightened *Auer* deference they are usually accorded for interpretations of their own regulations when they interpret a regulation that merely parrots statutory language enacted by Congress.²¹⁸ Under such circumstances, the Court has said that the question presented is not the meaning of a regulation that the agency itself has crafted, but rather the meaning of the statute.²¹⁹

Sometimes the parroted statutory language found in regulations contains mandatory terms. For instance, 29 U.S.C. § 1103(a) states that “all assets of an employee benefit plan shall be held in trust by one or more trustees.”²²⁰ Chapter 29 of the C.F.R. Section 2550.403a–1 states, identically, that “all assets of an employee benefit plan shall be held in trust by one or more trustees.”²²¹ To be sure, commands found in parroting regulations like this one may constrain the behavior of regulated entities. In this sense, they could be said to measure the construct of costs, burdens, or constraints. However, the commands contained in these regulations are not *agency-created* costs, burdens, or constraints on regulated entities. Rather, they are requirements imposed by Congress and the President through duly enacted statutes. Agencies are not at liberty to modify or eliminate such requirements even if doing so would relieve regulatory costs, burdens, or constraints on regulated entities. Only Congress and the President, acting together under Article I, Section 7 of the U.S. Constitution, can amend or repeal a duly enacted statutory requirement.²²² Thus, counting such requirements as costs, burdens, or constraints of *administrative regulation* misperceives the subject imposing them as well as the mechanism for alleviating them.

In light of the foregoing, it is untenable to maintain that the number of regulations or regulatory mandates on the books is an

218. *Gonzales v. Oregon*, 546 U.S. 243, 257 (2006).

219. *Id.*

220. 29 U.S.C. § 1103(a) (2011).

221. 29 C.F.R. § 2550.403a–1 (2017). *Compare* 12 U.S.C. § 2607(a) (2011) (discussing the anti-kickback provision of RESPA, which states that “[n]o person shall give and no person shall accept any fee, kickback, or thing of value” for referrals of mortgage loan business), *with* 24 C.F.R. § 3500.14(b) (2017) (stating identically in regulations issued by the Department of Housing and Urban Development (HUD) to implement RESPA that “[n]o person shall give and no person shall accept any fee, kickback, or other thing of value” for referrals of mortgage loan business).

222. U.S. CONST. art. I, § 7.

accurate measure of the costs, the burdens, or the constraints of regulation on regulated entities. If regulation counts do not measure these constructs, is it possible that they serve as a proxy for something else that has not been explicitly articulated? The following Part explores this possibility.

III. THE UNQUANTIFIABLE COSTS OF REGULATION

Although regulation counts do not measure *actual* costs, burdens, or constraints on regulated entities, they might be an attempt to capture what I characterize here as the unquantifiable costs of regulation. Unquantifiable costs are different than costs that are merely unquantified, meaning that agencies have declined to monetize them for one reason or another.²²³ Unquantifiable costs are costs that *defy* quantification. This may strike some as an oxymoron. In the long-running debate over CBA, costs are not typically portrayed as unquantifiable in this sense. Costs are the easy part of the calculation.²²⁴ By contrast, CBA has long been criticized for its inability to account for a litany of unquantifiable *benefits*, from maintaining clear skies to preserving habitat for polar bears to promoting equity and justice. According to CBA critics, “[t]he basic problem with narrow economic analysis of health and environmental protection is that human life, health, and nature cannot be described meaningfully in monetary terms; they are priceless.”²²⁵

Traditionally, costs have not been portrayed in these terms. “[C]osts are typically easier to measure than benefits Costs often take the form of goods that are priced on markets, while benefits often do not. In addition, regulated entities themselves are often the source for information regarding regulatory costs, and they have incentives to produce information about those costs.”²²⁶ But could it be that some costs are priceless too? Regulation counting may be motivated by the intuition that the true costs of regulation, like the true benefits of regulation, are not fully accounted for in the ledger of monetized costs that agencies

223. Jonathan S. Masur & Eric A. Posner, *Unquantified Benefits and the Problem of Regulation Under Uncertainty*, 102 CORNELL L. REV. 87, 87–91 (2016).

224. *Id.* at 116 (“[C]osts are typically easier to measure than benefits Costs often take the form of goods that are priced on markets, while benefits often do not. In addition, regulated entities themselves are often the source for information regarding regulatory costs, and they have incentives to produce information about those costs.”).

225. ACKERMAN & HEINZERLING, *supra* note 17, at 8.

226. Masur & Posner, *supra* note 223, at 116.

regularly include in their cost-benefit analyses. If this is correct, what might the unquantifiable costs of regulation be? I leave a full elaboration of the answer to those concerned about accounting for them. Preliminarily, I suspect that they encompass a set of psychic burdens, ranging from the stress business owners experience in trying to comply with extensive and complex regulatory requirements, to the felt experience of some regulated entities and citizens that regulation impinges on their personal freedom and diminishes liberty in society more broadly. Just as proponents of regulation developed metrics to measure seemingly unquantifiable benefits of regulation,²²⁷ regulation counts might be an attempt to capture similarly difficult-to-quantify psychic and liberty costs of regulation.

Indeed, much of the political rhetoric around regulation counts links the sheer number of regulations to the psychological well-being of business owners and to broader liberty interests. Upon signing EO 13,771, President Trump remarked sympathetically that it was an attempt to remedy the fact that American businesses “have been treated very badly.”²²⁸ In subsequent remarks, President Trump lamented:

Unchecked regulation undermines our freedoms and saps our spirit, destroys our companies. . . . We are a nation of explorers and pioneers and innovators and inventors, and regulations have been *hurting that and hurting it badly*. . . . So together, let’s cut the red tape. Let’s set free our dreams. And, yes, let’s make America great again. And one of the ways we are going to do that is by getting rid of a lot of unnecessary regulation.²²⁹

Ascertaining no economically justifiable purpose for EO 13,771, economist Robert Shiller surmised that it was likely adopted to salve the feelings of individuals who “have strong business connections and seem to take regulation as a personal affront, as if it stands as a barrier to their self-actualization and personal fulfillment.”²³⁰

The proposition that regulation counts might be a proxy for these types of unquantifiable regulatory burdens opens interesting new empirical, theoretical, and political terrain. Empirically,

227. REVESZ & LIVERMORE, *supra* note 17, at 47–48.

228. Bourree Lam, *Trump’s ‘Two-for-One’ Regulation Executive Order*, ATLANTIC ONLINE (Jan. 30, 2017), <https://www.theatlantic.com/business/archive/2017/01/trumps-regulation-eo/515007>.

229. *Transcripts*, CNN (Dec. 14, 2017), <http://transcripts.cnn.com/transcripts/1712/14/cnr.06.html>.

230. Robert J. Shiller, *Why Trump’s 2-for-1 Rule on Regulations Is No Quick Fix*, N.Y. TIMES (Feb. 17, 2017), <https://www.nytimes.com/2017/02/17/upshot/why-trumps-2-for-1-rule-on-regulations-is-no-quick-fix.html>.

it suggests the contours of a well-defined construct that could be used to develop testable hypotheses. For instance, regulation counters could theorize psychic burden as the construct measured by regulation counts and could test empirical relationships between the psychic burdens of regulation and macroeconomic outcome variables. To test these relationships, researchers would have to establish, first, that the number of regulations or regulatory mandates does, indeed, meaningfully measure psychic burdens on owners of regulated business and that psychic burdens vary with the quantity of regulations. It is not clear that regulation counts would be the best measure of psychic burdens or that the psychic burdens of regulation vary continuously, increasing incrementally with each new regulation added.

If such a relationship could be shown, regulation counters could theorize mechanisms by which regulation-induced psychic burdens influence macroeconomic outcomes like productivity and employment. For instance: Do psychically burdened business owners forbear from producing or hiring, even if doing so is economically irrational from an efficiency standpoint? Do the psychic burdens of regulation shape business owners' perceptions of the business climate in ways that make them less productive or less likely to hire? Do citizens in general put forth less productive effort if they believe their liberty to be unduly constrained? Such hypotheses are theoretically supportable given what we know about how psychology shapes economic action,²³¹ and exploring them empirically could produce valuable insights.

If such hypothesized relationships were to be established by empirical evidence, the next set of questions would concern whether removing regulations from the books is the most effective response. It would be necessary to demonstrate, for instance, that reducing the number of regulations or regulatory mandates would actually reduce the psychic burdens of regulation, and that this is a more effective method of alleviating psychic burdens than other mechanisms. If the burdens of regulation are, indeed, psychic, then perhaps it would be more effective to shift

231. See, e.g., RICHARD H. THALER, *MISBEHAVING: THE MAKING OF BEHAVIORAL ECONOMICS* (2015) (explaining how behavioral economics integrates insights from psychology to understand human behavior); Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 *STAN. L. REV.* 1471 (1998) (explaining how bounded rationality, bounded self-interest, and bounded willpower influence decision making); Jeffrey J. Rachlinski, *The Psychological Foundations of Behavioral Law and Economics*, 2011 *U. ILL. L. REV.* 1675 (2011) (highlighting the importance of psychology in understanding economic behavior).

perceptions of regulatory burdens rather than to change the *actual* number of regulations on the books. Such a shift in perception might be achieved by moderating hysterical political rhetoric that incites regulatory passions by endlessly decrying the massive quantity of regulation crushing the populace.

The theoretical and political implications of surfacing the psychic burdens of regulation are more radical, for they gesture toward the unraveling of the reigning consensus around CBA. As discussed above, regulation counting eschews foundational principles of welfare economics underlying CBA by ignoring the benefits of regulation.²³² This deprives CBA of a principled justification. But more subtly, and perhaps more treacherously, regulation counting suggests that even the costs of regulation have not been captured adequately by CBA. It becomes exceedingly difficult to sustain the quantification enterprise if the costs as well as the benefits of regulation include significant unquantifiable feelings, values, and moral commitments. Understood in this way, the widespread embrace of regulation counting suggests the need to develop (or to resurrect) alternative decision-making structures to CBA that better account for emotional and normative considerations.²³³ Such decision-making structures might allow regulators and the public to weigh more openly and frankly the values at stake in regulation. For instance, what are the relative values of, on the one hand, protecting citizens from preventable harms like mine collapses, plant explosions, and toxic pollution and, on the other hand, preserving their cherished experience of living in a free society? Ideally, framing questions in this way would lead to more honest political dialogue about regulatory methods, priorities, and trade-offs.

Setting aside for the moment the empirical, theoretical, and political possibilities presented by the psychic burden construct, it is important to stress three points. First, to date, none of the above empirical claims about the relationship between psychic burdens and economic outcomes has been established empirically—or, for that matter, seriously theorized. Regulation counters have not explicitly claimed psychic burden as their construct. It is not entirely clear why not. Perhaps it connotes weakness or victimhood on the part of business owners in ways

232. See *supra* Part II.B.

233. See, e.g., Gregory C. Keating, *Is Cost-Benefit Analysis the Only Game in Town?*, 91 S. CAL. L. REV. 195, 198 (2018) (exploring the application of “standards of precaution other than cost-benefit analysis [that] are common in our law”).

that are politically unpalatable. Perhaps regulatory anxiety is too valuable a trigger for political mobilization to acknowledge as the *cause* of the problem. Attempts to alleviate it would blunt this political weapon. In any event, the speculative propositions suggested in this Section are, for now, just that.

Second, inflamed regulatory passions, standing alone, do not provide a sufficiently rational basis for deregulatory policies imposed by the executive. A policy calculated to lift the down-trodden spirits of the President's supporters in the business community surely falls into the realm of political justifications for agency action that courts have soundly rejected on judicial review.²³⁴ Moreover, it seriously threatens the constitutional balance of powers among the branches in the administrative state. Policies like 2-for-1 are not merely political in the sense that they relate to the strategy or ideology of a particular party; they are baldly distributional. EO 13,771 is a policy choice to redistribute wealth to a select category of individuals favored by the President, whom the President sees as disfavored by certain statutory schemes mandating regulation. In many cases, the regulation counting (and cutting) required by EO 13,771 would force agencies to redistribute wealth that, according to principles of CBA, has been efficiently distributed by already-enacted or proposed regulations.

This is deeply troubling from a separation of powers perspective. Distributive choices are at the very heart of the legislative prerogative.²³⁵ Article I, Section I, of the U.S. Constitution delegates legislative power exclusively to Congress.²³⁶ Although a long line of cases permits Congress to delegate the implementation of federal statutes to the executive branch,²³⁷ equally well-

234. *E.g.*, *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 51–56 (1983); *see also* Jodi L. Short, *The Political Turn in American Administrative Law: Power, Rationality, and Reasons*, 61 DUKE L.J. 1811, 1823–28 (2012); Kathryn A. Watts, *Proposing a Place for Politics in Arbitrary and Capricious Review*, 119 YALE L.J. 2, 83 (2009).

235. *Indus. Union Dep't, AFL-CIO v. Am. Petroleum Inst.*, 448 U.S. 607, 663 (1980) (Burger, J., concurring).

236. U.S. CONST. art. I, § 1.

237. *Whitman v. Am. Trucking Ass'n*, 531 U.S. 457 (2001) (holding that the Clean Air Act properly delegated legislative power to the Environmental Protection Agency); *INS v. Chadha*, 462 U.S. 919 (1985) (holding that Congress must abide by its delegation of authority to the attorney general and cannot veto the delegation by the vote of one House); *J.W. Hampton, Jr. & Co. v. United States*, 276 U.S. 394 (1928) (holding that the delegation of power to the President to increase or decrease the duties imposed by the Tariff Act of September 21, 1992 was constitutional); *Cargo of the Brig Aurora v. United States*, 11 U.S. 382 (1813) (upholding a conditional law that reinstated a trade prohibition

established principles of administrative law seek to ensure the rational and non-arbitrary execution of that power by agencies.²³⁸ The principle of non-arbitrariness serves not only rule of law values, but also separation of powers principles, by making sure that agencies do not stray too far from their statutory authority into the realm of presidential patronage. These foundational constitutional principles and values should not be compromised by masking baldly distributive political motivations with seemingly innocuous and falsely objective regulation counts.

Third, if regulation does, indeed, impose unquantifiable psychic burdens, this has strategic implications for proponents of regulation as they think about how to combat deregulatory initiatives. In eschewing the pretense of welfare maximization, the regulation counting project suggests that the deregulatory impulse is driven as much by a deep-seated emotional antipathy toward regulation as by economic concerns about costs and efficiency.²³⁹ If this is the case, then a generation of regulatory reform efforts aimed at bolstering support for regulation by grounding it in market mechanisms have missed the mark. To date, the prevailing strategy of regulation proponents has been to embrace the CBA discourse of efficiency maximization and to demonstrate the welfare-enhancing properties of regulation.²⁴⁰ The regulation counting project exposes the limits of this strategy by revealing that the true aim of the deregulatory project is not more efficient regulation, but simply less.

This insight suggests that proponents of regulation must do a better job of addressing—or neutralizing—negative feelings about regulation if they are to salvage it. In fact, an influential strand of the regulatory reform project has included sustained

against Great Britain unless the President proclaimed Great Britain was no longer violating the United States' neutrality).

238. See *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 536 (2009) (Kennedy, J., concurring) (stressing that agencies must ground their decisions in “principles that are rational, neutral, and in accord with the agency’s proper understanding of its authority”); *State Farm*, 463 U.S. at 52; *Citizens to Pres. Overton Park v. Volpe*, 401 U.S. 402 (1971) (holding that agencies must produce a contemporaneously developed record to facilitate judicial review); *SEC v. Chenery Corp.*, 332 U.S. 194 (1947) (holding that agencies must provide contemporaneous justifications for their actions).

239. See Short, *supra* note 33, at 634–38 (demonstrating that concerns about regulation’s restrictions on liberty dominated debates about regulatory reform between 1980 and 2005).

240. REVESZ & LIVERMORE, *supra* note 17, at 12–13; CASS R. SUNSTEIN, *THE COST-BENEFIT STATE: THE FUTURE OF REGULATORY PROTECTION* 6–10 (2002).

attempts to do just that through programs that cultivate cooperative relationships with regulated entities. These programs avoid punitive enforcement practices in favor of dialogue with regulated entities about what compliance entails, flexibility in the methods required to achieve compliance, and a preference for forbearance and compliance assistance over punishment for non-compliance.²⁴¹ It appears, however, that such cooperative approaches to regulation have failed to bolster the feelings of the business community towards the regulatory enterprise.²⁴² Just as regulation counting represents a new chapter in deregulatory policy, it should prompt a wholesale reassessment of progressive regulatory reform efforts.

IV. WHAT'S THE HARM IN COUNTING?

These are demanding prescriptions that are not easily realized in the short term. Which begs the question, why not just go ahead and count in the meantime? Regulation counters appear to enjoy this activity, and while they recognize its empirical shortcomings, they broadly maintain that it is better to have counts than not to quantify regulation at all.²⁴³ I argue in this Section that there are three reasons to stop the counting now. First, it undermines the achievement of statutory goals. Second, it is costly and wasteful. Third, it crowds out meaningful dialogue and research about the real and difficult problems of regulation.

First, counting for counting's sake undermines the achievement of statutory goals. Duly enacted legislation, passed

241. See, e.g., IAN AYRES & JOHN BRAITHWAITE, *RESPONSIVE REGULATION: TRANSCENDING THE DEREGULATION DEBATE* 118–20 (Donald R. Harris et al. eds., 1992); EUGENE BARDACH & ROBERT A. KAGAN, *GOING BY THE BOOK: THE PROBLEM OF REGULATORY UNREASONABLENESS* 75–76 (1982); Michael C. Dorf & Charles F. Sabel, *A Constitution of Democratic Experimentalism*, 98 COLUM. L. REV. 267, 371–73 (1998); Orly Lobel, *The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought*, 89 MINN. L. REV. 342, 418–19 (2004); Ruhl & Salzman, *supra* note 5, at 844 n.274.

242. BARDACH & KAGAN, *supra* note 241, at 84.

243. See, e.g., TEN THOUSAND COMMANDMENTS, *supra* note 5, at 16 (concluding that “it is worthwhile to track the *Federal Register’s* page counts” after acknowledging that “there are problems with relying on page counts” and describing them); Dawson & Seater, *supra* note 5, at 139–40 (recognizing that “[a] counting measure obviously is imperfect in that two identical values may comprise regulations of different types and, even within a given type, may represent regulations of different stringency” but deciding to count the pages of the C.F.R. because this count “probably captures at least some of regulation’s complexity”).

through the “single, finely wrought and exhaustively considered”²⁴⁴ procedures set forth in Article I, Sections 1 and 7 of the U.S. Constitution, has charged agencies with accomplishing specific tasks for the purpose of achieving specific social and economic goals. These statutes are intended to benefit or protect many different constituencies, including workers, consumers, investors, businesses, children, the infirm, the elderly, and the public at large. Denying or delaying the enactment of important new rules that are statutorily mandated as “necessary to protect public health and welfare can have severe, even disastrous, consequences: think of tainted food, toxic spills, unavailable medicines, unsafe trains and planes.”²⁴⁵ Counting thus puts protected statutory rights holders at grave risk of harm.

Second, counting is, itself, costly and wasteful. EO 13,771 requires agencies to devote substantial new resources to analyze the costs of regulations and to propose and support the repeal of regulations through notice and comment procedures.²⁴⁶ Supporters of the Order have suggested that Congress will have to appropriate funds for agency staff positions dedicated to these tasks.²⁴⁷ In other words, this purported cost-cutting effort will be extraordinarily costly.²⁴⁸ And it provides little in the way of benefits to offset these costs.

244. *INS v. Chadha*, 462 U.S. 919, 951 (1983).

245. Freeman, *supra* note 43.

246. Ruhl & Salzman, *supra* note 5, at 787 (“Initiating and defending regulatory erosion also diverts agency resources and public attention from new initiatives more likely at any moment to be deemed popular and positive.”).

247. BROOKINGS EVALUATION, *supra* note 29, at 15.

248. Notably, it is much less costly to implement 2-for-1 type policies in the other countries that have adopted them, because these countries are parliamentary democracies. Administrative agencies play a very different role in parliamentary systems than in presidential systems like that prevailing in the United States, and they are governed by very different procedural rules. First, it is easier to enact regulatory rules legislatively rather than administratively in a parliamentary system than in a presidential system because of the identity between the legislature and the executive. Consequently, there is less delegation of rulemaking functions to administrative agencies and greater legislative control and prerogative in parliamentary systems than in the U.S. administrative state. Second, because administrative agencies are not entirely independent of the legislature in a parliamentary system, they are not subject to the same kinds of procedural safeguards imposed on U.S. agencies by the Administrative Procedure Act. In particular, parliamentary systems have no equivalent to notice and comment rulemaking, the time consuming and costly procedure by which U.S. agencies must enact and repeal regulations. There are minimal procedures constraining agencies’ ability to enact or repeal administrative regulations in parliamentary democracies. Thus, removing regulations from the books

Finally, counting distracts from serious political dialogue and research that could produce a more fair and effective regulatory system. Citizens look to government for protection from a host of risks arising out of a complex, technologically advanced society, from toxic pollution, to consumer fraud, to discrimination, to terrorism. Reducing political dialogue about these issues to the number of regulations on the books crowds out meaningful discussion of when and how we should regulate. These conversations are vital to surface and elaborate collective values about what kind of society we want to live in and how we should be governed, but it is difficult to hear them above the din of counting.

Research on regulation has an important role to play in shaping these conversations and in helping administrators implement policy arising out of them. The important empirical questions about regulation concern not how much of it there is, but under what conditions particular types of regulation are likely to be more or less effective. There are also important empirical questions about the spillover effects regulation might have on various economic outcomes, positive or negative. A handful of studies have sought to ascertain rigorously the relationship between regulation and employment in specific regulatory contexts. These studies, taken together, suggest that this relationship is complex and contingent:²⁴⁹ some regulations are associated with job losses,²⁵⁰ others are associated with job

does not require the same investment and diversion of administrative resources in these systems that it does in the United States.

249. David M. Driesen, *Does Regulation Kill Jobs?: The Limits of Quantification*, 9 REG. & GOVERNANCE 193, 193–94 (2015). See generally DOES REGULATION KILL JOBS? (Cary Coglianese et al. eds., 2013) (discussing the various empirical research on the effects of regulation on employment).

250. See, e.g., Joseph E. Aldy & William A. Pizer, *The Employment and Competitiveness Impacts of Power-Sector Regulations*, in DOES REGULATION KILL JOBS?, *supra* note 249, at 70 (finding negative employment effects in the most energy intensive sectors); cf. Richard D. Morgenstern et al., *Jobs Versus the Environment: An Industry-Level Perspective*, 43 J. ENVTL. ECON. & MGMT. 412 (2002) (predicting negative employment effects in industries where pollution abatement activities are not labor intensive and product demand is elastic).

gains,²⁵¹ others with the shifting of jobs among regions or sectors²⁵² or even within the same plant,²⁵³ and still other regulations have no statistically significant association with economic outcomes at all.²⁵⁴ In addition, research finds that the relationship between regulation and employment is moderated by non-regulatory factors, for instance, demand levels and industry concentration ratios.²⁵⁵ The bottom line is that no credible blanket statement can be made about the aggregate economic effects of regulation. Regulation counting distracts and diverts resources from serious research on economic and other consequences of regulation. Allowing regulation counts to drive policy increases the prospect that we will get these critical empirical questions wrong in specific instances, resulting in more economic harm than good.

CONCLUSION

Drawing on prevailing standards in social science research and a detailed analysis of federal regulations, this Article

251. See, e.g., Morgenstern et al., *supra* note 250, at 429 (finding positive employment effects in industries like petroleum and plastics where environmental compliance is labor intensive and product demand is relatively inelastic).

252. See, e.g., Michael Greenstone, *The Impacts of Environmental Regulations on Industrial Activity: Evidence from the 1970 and 1977 Clean Air Act Amendments and the Census of Manufacturers*, 110 J. POL. ECON. 1175 (2002) (finding that in the first fifteen years of the Clean Air Act, jobs and capital investment likely shifted back and forth from nonattainment areas to attainment areas but that there was no net reduction in aggregate economic activity).

253. See, e.g., Richard D. Morgenstern, *Analyzing the Employment Impacts of Regulation*, in DOES REGULATION KILL JOBS?, *supra* note 249, at 33, 46 (reporting that “there is abundant anecdotal evidence that a large proportion of workers ‘displaced’ by environmental regulation move to other jobs in the same plant or firm”).

254. See, e.g., Aldy & Pizer, *supra* note 250, at 81 (finding no employment impact of environmental regulations for eighty percent of manufacturers); Eli Berman & Linda T. M. Bui, *Environmental Regulation and Labor Demand: Evidence from the South Coast Air Basin*, 79 J. PUB. ECON. 265, 269 (2001) (finding negligible employment impacts of Clean Air Act regulation); Nathan Goldschlag & Alex Tabarrok, *Is Regulation to Blame for the Decline in American Entrepreneurship?*, 33 ECON. POL’Y 5 (2018) (finding no statistically significant relationship between RegData’s regulation counts and trends in economic dynamism); Morgenstern et al., *supra* note 250, at 429 (finding little evidence of employment consequences of regulation in the steel and pulp and paper industries, where labor represents a large share of production costs and demand is relatively elastic).

255. Wayne B. Gray & Ronald J. Shadbegian, *Do the Job Effects of Regulation Differ with the Competitive Environment?*, in DOES REGULATION KILL JOBS?, *supra* note 249, at 51, 59–61.

demonstrates that regulation counting is an irrational and empirically unsound method of measuring constructs like regulatory costs or burdens and empirically assessing their relationship to economic outcomes. Because regulation counts are not a good proxy for mechanisms like cost or burden that are purported to affect economic outcomes, they have limited ability to support causal claims about the relationship between regulation and economic outcomes. Two critical implications flow from this. First, agencies and courts should not rely on empirical studies that employ regulation counts to implement or uphold the legality of deregulatory counting policies like 2-for-1. Second, although the number of regulations on the books is not an accurate measure of the costs, the burdens, or the constraints of regulation on regulated entities, it may serve as a proxy for the unquantifiable costs of regulation. This possibility opens up new ways of thinking about the deregulation and regulatory reform projects and suggests the need for a collective dialogue about the values served by regulation and the way regulation helps and harms different groups of citizens. It is time to stop counting and start engaging in meaningful conversations about specific societal problems and appropriate regulatory responses.