Cost-Nothing Analysis: Environmental Economics in the Age of Trump

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I am going to talk tonight about economic analysis of environmental policy. My talk has four main parts, plus a conclusion that not everyone will like. First, I'm going to explain how, over several decades, cost-benefit analysis came to dominate federal environmental policy. Next, I will explain why I believe cost-benefit analysis is a problematic way to evaluate environmental policy. After that, I'll turn to a discussion of how the Obama administration approached these issues. And fourth, I will describe how, in the Trump administration, cost-benefit analysis has mutated into what I will call "cost-nothing" analysis—an analysis in which only costs, and not benefits, matter, and in which the overriding assumption is that it costs us nothing to discard policies aimed at protecting human health and the environment.

I will conclude by tracing the relationship between our current environmental predicament and the decades of presidential politics leading up to it. I will suggest to you that even though the current administration's approach to environmental policy is indeed extreme in its unrelenting deregulatory thrust and in its flat-out denial of the benefits of environmental protection, it is a predictable consequence of our decades-long acceptance of an overly powerful presidency—one in which the president has long asserted the power to substitute his own economic

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theories for the decision-making criteria Congress has specified in our environmental laws.

First: how did cost-benefit analysis come to dominate environmental policy? The short answer is that presidents, by fiat, simply made it so.

All of our major federal environmental statutes were first passed in a single decade, from New Year's Day in 1970, when President Richard Nixon signed the National Environmental Policy Act into law, to December 1980, when the Superfund law was passed as President Jimmy Carter was about to leave office.[1] None of these statutes installed formal cost-benefit analysis as its decision-making criterion. Indeed, to this day, the only federal statute that explicitly embraces the formal cost-benefit method I will discuss tonight is a single provision of the Safe Drinking Water Act, added to the statute in 1996.[2] At many statutory decision points, Congress looked cost-benefit analysis directly in the eye and said no thank you.

Even in the face of these statutes, however, presidents for decades have measured the wisdom of major environmental policies against a cost-benefit metric. They have embraced a process of White House review of environmental rules that insists major rules pass a cost-benefit test. They have pressed agencies to adopt legal interpretations consistent with their economic theories.

The practice of White House review of agency rules goes back as far as President Richard Nixon—as far, in other words, as the modern era of environmental law. In environmental circles, President Nixon is known as the president who created the Environmental Protection Agency. He was in office when the Clean Air Act, Clean Water Act, Endangered Species Act, and National Environmental Policy Act were passed. Some regard him as the first "environmental president." We should remember, though, that he did veto the Clean Water Act, and when Congress overrode that veto, he tried to impound the funds Congress had appropriated for addressing water pollution. The Supreme Court eventually held that he could not impound this money. But presidents since Nixon have exercised power over environmental policy in another way—by requiring that major regulatory initiatives be reviewed by, and approved by, the White House.

Presidents from Nixon to Carter embraced some form of White House review of agency rules. The practice of White House regulatory review didn't really take off in a systematic way, however, until President Ronald Reagan came into office. In one of his first acts as president,

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[1] WILLIAM SWEET, CLOSING THE ENVIRONMENTAL DECADE (CQ Press 1979), http://library.cqpress.com/cqresearcher/cqresrre1979111600.

[2] Pub. L. No. 104-182, § 1(a), 10 Stat. 1936 (codified as amended at 42 U.S.C. § 300g-1(b)(3)(C)(i-iii) (2018)).

President Reagan—who famously said "government *is* the problem"—issued an executive order requiring agencies to submit major rules to the White House before issuing them.[3] This executive order provided that any regulation that would cost more than $100 million per year must be accompanied by a cost-benefit analysis.[4] President Reagan later designated the Office of Information and Regulatory Affairs ("OIRA"), within the Office of Management and Budget ("OMB"), as the entity responsible for overseeing the process of regulatory review.[5]

And with that, we were off and running toward a regulatory system with two striking and problematic features. First, the president—and his aides in the White House—would become the decision makers when it came to important regulatory policies. Second, they would deploy cost-benefit analysis as the decision-making criterion in reviewing these policies.

Surprisingly, this basic structure has persisted since the Reagan Administration, and has persisted across presidents of different political parties and different regulatory philosophies. Every president since Reagan have found it in their interest to exert control over executive agencies' regulatory choices and to use cost-benefit analysis as a decision-making tool. Presidents, from Clinton on, have approached this matter so consistently that they have found it in their interest to retain President Clinton's own executive order on regulatory review.[6] To this day, President Clinton's executive order prescribing the basic structure and criteria for White House review of agency rules remains in place. Even President Trump, who is not shy about issuing executive orders and revoking prior ones, has not withdrawn the Clinton-era executive order on regulatory review.

Presidents have maintained this system of regulatory review in the face of what I regard as two significant legal obstacles. The first is that our environmental statutes, with very few exceptions, do not identify the president as the decision maker with respect to environmental policy. Instead, they identify agencies or agency heads as the decision makers. The Clean Air Act, for example, specifically identifies the Administrator

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3 Exec. Order No. 12291, 3 C.F.R. § 127 (1981).

4 *Id.* § 1(b)(1).

5 CURTIS COPELAND, CONG. RESEARCH SERV., RL32397, FEDERAL RULEMAKING: THE ROLE OF THE OFFICE OF INFORMATION AND REGULATORY AFFAIRS 4 (2011).

6 For a discussion of the executive orders governing the period between the Reagan administration and Obama administration, see Lisa Heinzerling, *Inside EPA: A Former Insider's Reflections on the Relationship Between the Obama EPA and the Obama White House*, 31 PACE ENVTL. L. REV. 325, 327–41 (2014). While President Trump has issued his own executive order on regulatory review (Exec. Order No. 13371, 3 C.F.R. § 284 (2017)), he has not rescinded President Clinton's executive order on this matter.

of the Environmental Protection Agency as the person who decides how strict our national ambient air quality standards will be and whether a particular air pollutant endangers public health or welfare.[7] The statute does not identify the president as the person who decides these things. It certainly does not identify White House aides or OIRA staff as the people who decide these things. Nor do other environmental statutes identify these people as the environmental decision makers. Of course, proponents of the constitutional theory of the unitary executive would say that Congress may not prevent the president from exercising complete control over the administrative agencies, including control over the specific regulatory decisions they make. But the Supreme Court has never—at least not yet—so held. For now, at least, there remains a legal question as to why the president and his aides in the White House are making decisions that Congress has delegated to other personnel in the executive branch.

The second legal problem with the current practice of White House regulatory review is that most environmental laws do not install cost-benefit analysis as the relevant decision-making criterion. In fact, as I noted earlier, only a single environmental provision explicitly embraces formal cost-benefit analysis as a decision-making tool. One provision of the Safe Drinking Water Act authorizes the EPA to consider the results of quantitative cost-benefit analysis in developing maximum contaminant levels for pollutants in drinking water.[8] No other environmental law explicitly embraces the kind of economic analysis that presidents have required for regulatory decisions.

There is an obvious wrinkle here. Although only one statute explicitly embraces cost-benefit analysis, many other environmental statutes are ambiguous, or arguably so, on the use of cost-benefit analysis. And during the same period presidents across political parties and regulatory philosophies embraced cost-benefit analysis, the executive branch also came to enjoy a great deal of judicial deference to its interpretive choices. This deference comes, of course, from the famous *Chevron* doctrine, which holds that courts will defer to an agency's reasonable interpretation of a statute the agency is charged with administering.[9] Under *Chevron*, if a statute is ambiguous on the relevance of cost-benefit analysis to environmental decisions, courts will uphold a reasonable agency choice in either direction.[10]

And so it came to pass that some agency decisions applying a cost-benefit test in the environmental context were judicially approved, even

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7 42 U.S.C. § 7409(a), (b) (2018).

8 42 U.S.C. § 300g-1(b)(3)(C)(i-iii) (2018).

9 *See* Chevron U.S.A. v. Natural Resources Defense Council, 467 U.S. 837 (1984).

10 *Id.* at 844.

though the relevant statutes did not explicitly embrace cost-benefit analysis. For example, in *Entergy v. Riverkeeper*, the Supreme Court upheld the EPA's decision to apply a cost-benefit test to its Clean Water Act rule on cooling water intake structures at power plants.[11]

The *Chevron* principle could have led environmental agencies either toward or away from cost-benefit analysis under ambiguous statutes. However, presidents' embrace of cost-benefit analysis led them to press the environmental agencies to accept interpretations of their statutes that installed cost-benefit analysis as the decision-making criterion. Presidents' collective enthusiasm for cost-benefit analysis meant that even in Democratic administrations sympathetic to environmental imperatives, agencies deepened the legal system's reliance on this framework for decision.

Consider the Obama administration. The Obama White House strengthened the dominance of cost-benefit analysis in environmental policy by insisting on interpretations of environmental statutes that embraced cost-benefit tests at every opportunity. In other words, the Obama White House pressed the agencies that implement environmental statutes to exercise their interpretive discretion in favor of adopting cost-benefit analysis as their decision-making criterion. To some extent, this move closed the legal gap I mentioned earlier: that is, the gap between the environmental statutes' apparent embrace of criteria other than cost-benefit analysis and the adoption of cost-benefit analysis as a method for evaluating environmental policy. The problem, from my perspective, is that this pressure often came in the face of indications that Congress had chosen to reject cost-benefit analysis as the decision-making method and, furthermore, the pressure came from officials whom Congress had not charged with making the environmental decisions in question.

The accretion of power in the presidency—specifically, power to direct and countermand particular decisions made by the very officials charged by Congress with making them—thus combined with agencies' interpretive discretion under *Chevron* to make cost-benefit analysis the dominant decision-making criterion for environmental policy.

The Supreme Court then took this trend to another level when, in a case called *Michigan v. EPA*, it held that the EPA had erred in declining to interpret an important provision of the Clean Air Act to embrace cost-benefit balancing.[12] The key statutory term in *Michigan v. EPA* was "appropriate"; the EPA had erred, Justice Scalia wrote, in interpreting the word "appropriate" to give it discretion not to consider costs in deciding

11 Entergy Corp. v. Riverkeeper Inc., 556 U.S. 208 (2009).

12 Michigan v. EPA, 135 S.Ct. 2699 (2015).

whether to regulate toxic air emissions from power plants.[13] The word "appropriate" appears over 10,000 times in the U.S. Code. We will be sorting out the cost-benefit implications of the Court's decision for years to come.

Thus far I have tried to explain how cost-benefit analysis came to dominate decisions on environmental policy, despite Congress's failure to embrace this method in our environmental laws. But what, you might be thinking, is wrong with cost-benefit analysis? Isn't it only rational to consider the balance of costs and benefits in making important decisions?

Now I'd like to explain why I think cost-benefit analysis is not a good way of making important decisions about the environment. To preview: I believe that cost-benefit analysis loads the dice against ambitious environmental protection, and this is why I think it's a bad way to make environmental decisions.

To understand why I think this, you need to know how cost-benefit analysis works. As its name suggests, and as you probably know, cost-benefit analysis proceeds by comparing the economic costs of a policy to its economic benefits. A policy passes a cost-benefit test when its benefits exceed its costs. Technically, the state of affairs in which benefits exceed costs is known as "Kaldor-Hicks" efficiency, after the economists who championed this criterion for economic efficiency.[14] The idea behind Kaldor-Hicks efficiency is that a decision is efficient if the winners in the decision come out far enough ahead that they could compensate the losers.

Importantly, however, the winners need not *actually* compensate the losers; the analysis simply needs to show that, *in theory*, they could do so. Notice, then, that the losers don't need to come out ahead; indeed, they can come out very much behind. Moreover, the winners can be highly concentrated and very few in number. The pie might get bigger, but the pieces all might go to just a few people.

While presidents, particularly in Democratic administrations, have been careful to give occasional shout-outs to fairness and equity as important considerations in regulatory policy, these considerations almost never play a decisive role once cost-benefit analysis gets rolling. So understand this: when you embrace cost-benefit analysis as a decision-making criterion, you are embracing a method that shunts fairness to the side in its pursuit of overall wealth. As environmental law is judged more and more by its ability to provide clean air, water, and land to all people,

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13 *Id*. at 2707–08.

14 FRANK ACKERMAN & LISA HEINZERLING, PRICELESS: ON KNOWING THE PRICE OF EVERYTHING AND THE VALUE OF NOTHING 34–35 (2004).

the efficiency criterion of cost-benefit analysis seems, to me, ever more behind the times.

Other aspects of the cost-benefit method also disfavor ambitious environmental protection. Cost-benefit analysis requires the quantification and monetization of the significant costs and benefits of environmental decisions. Although identifying the economic costs of any given policy can be challenging, the real troubles appear in the attempt to fit human health and the environment into an economic equation.

Serious problems begin to emerge at the very first step of cost-benefit analysis: that is, the quantification of benefits. Many of these benefits defy quantification. The benefits of environmental protection span an enormous range from protecting human life and health, to protecting ecosystems and species, to protecting crops and property, to protecting values like freedom, fairness, and community. In any given cost-benefit analysis, one will usually find that significant categories of benefits cannot be quantified. When they are not quantified, their effective value drops to zero in the resulting analysis. They become an afterthought.

Examples of this phenomenon could be multiplied. One of my "favorites" comes from a cost-benefit analysis of a rule protecting roadless areas in national forests. For this rule, issued during the Clinton administration, the government estimated the benefit of protecting roadless areas to be $219,000.[15] This benefit reflected the costs that would be saved because the roads that would otherwise have been built would not need to be maintained! That's right: the quantified and monetized benefit of protecting pristine areas in national forests was the money saved by not maintaining roads. The government also noted that the roadless area protection rule would protect air and water quality, recreational opportunities, wildlife habitat, and livestock grazing, but it could not quantify these benefits. Yet these were the *very reasons* for protecting roadless areas in the first place. The *reasons for* protecting roadless areas were the very things that could not be quantified in the cost-benefit analysis. This is not an unusual state of affairs.

Thus, even at the first step of cost-benefit analysis—quantification—important values can drop out of the picture. In an area such as environmental protection, where so many important benefits are not susceptible of quantification, or at least not with the time and resources available, a calculation that requires such quantification will leave many important features of the problem unaddressed.

The second step of cost-benefit analysis is also vexing. At this stage, the quantified benefits are monetized; that is, they are translated into dollar

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15 *Id.* at 5–7.

values. Even when benefits can be quantified, translating them into dollars—translating into monetary values benefits such as human lives saved, human illnesses averted, and ecosystems protected—is challenging, to say the least.

One might think that the most challenging of these operations would be the monetization of life itself. How could the government place a monetary value on human life? To put the point more precisely, how could the government, in considering whether to restrict conduct that kills people, identify a financial level at which it becomes appropriate to simply and consciously allow that conduct to occur rather than taking action to avert it?

In thinking through this problem of valuing human life, economists faced another conundrum. The way economists typically value regulatory benefits is to ask either how much money people are willing to pay to obtain the benefits or how much money they are willing to accept as compensation for forgoing the benefits. The idea is to figure out what would happen in an economic market; in such a market, what value would individuals voluntarily place on the benefits of environmental protection?

When it comes to death, however, this is not a very helpful question. If you ask a person how much she is willing to pay to avoid certain death, she will likely pay up to the very limit of her financial resources; she will pay whatever she can to avoid certain death. The willingness to pay thus measured will not reflect *willingness* to pay at all, but only *capacity* to pay; it will measure not how much she values her life, but how much money she has. If, on the other hand, you ask a person how much she is willing to accept as compensation for forgoing continued life—in other words, for accepting certain death—she will likely tell you to go away. She will probably not even be very nice about it. She will tell you that she will not accept any amount of money for letting you kill her. In refusing the deal, she is refusing to take part in the kind of market transaction that serves as the model for the behavior evaluated in cost-benefit analysis.

In order to put a value on lives saved by regulation, therefore, economists needed to try a different tack. They could not ask a question about the value of certain death. So they instead asked a question about the *risk* of death. They found that people do indeed pay to avoid small risks of death, and that people do indeed accept compensation in order to take on such risks. Economists found that they could aggregate these small amounts of money to reflect the total amount a group of people would pay or accept to either avoid or accept one death in their group. They called the resulting monetary value the value of a "statistical life." A statistical life is the life we lose when a collection of small risks to humans produces

a death. The value of a statistical life is the amount of money we would be willing to pay or accept to either avoid or accept that loss of life.

To solidify this point, suppose that one million people all face a one in one million risk of death from being exposed to a particular air pollutant. Suppose these people are each willing to pay ten dollars to avoid that one-in-a-million risk. All told, this population is willing to pay ten million dollars to avoid one death from the air pollution. In this case, we would say that the value of the statistical life is ten million dollars.

In this way, economists avoided the puzzle of valuing certain death. They simply redefined the value being measured as a statistical life rather than a certain, identified human life. In this way, they also produced a respectably large value for deaths that occur due to environmental threats. As it happens, the going value for statistical lives as estimated by the U.S. government is about ten million dollars.[16] I used this nice round number to illustrate the concept of a statistical life, but in fact it is also about the same amount most agencies use today in valuing mortality risks.

Even the ten-million-dollar figure might be too low. This value comes from studies of the labor market, in which workers supposedly knowingly and voluntarily trade off risks for money; that is, they knowingly and voluntarily accept workplace risks in exchange for higher wages. This calculus leaves out other populations, such as children, who do not participate in the labor market and whose value to us might not be the same as the value we attach to adults of working age. The calculus also makes a rather heroic assumption that workers in risky jobs not only know and understand the precise risks they face on the job, but also that they voluntarily accept those risks in return for money—and *not* because their employment choices are limited by economic circumstances, geographic constraints, discrimination on the basis of race, ethnicity, or gender, or other factors that might limit their ability to bargain for a better tradeoff between risk and money.

Even if the roughly ten-million-dollar value for statistical lives is perfectly consistent with our knowing and voluntary preferences, however, there remains the task of monetizing the many other benefits of environmental protection. Constraints here include the mundane but ever-present limits on the government's time and resources; often we cannot attach dollar values to the benefits of environmental policy not because it is impossible, but because time and resources do not permit further intricate analysis.

In other cases, attaching a dollar value to regulatory benefits may misconstrue the very benefits under review. Consider the Obama

16 W. KIP VISCUSI, PRICING LIVES: GUIDEPOSTS FOR A SAFER SOCIETY 6 (2018).

administration's cost-benefit analysis of measures to reduce the incidence of rape and other forms of sexual abuse in prisons. The Department of Justice produced an analysis that cataloged seventeen different kinds of rape and sexual abuse and attached a dollar figure to each.[17] The monetary values supposedly reflected the amount of compensation victims would require to accept rape or sexual abuse or the amount they would pay to avoid rape or sexual abuse.[18] The treatment of rape and sexual abuse as market transactions, and as voluntary market transactions at that, deeply misconstrued the nature of the relevant harms. By the brute force of economic logic, it transformed violence and subordination into just another day at the market.

Despite these profound limitations of the cost-benefit framework, an environmental regulation that averts a significant number of quantified human deaths stands a fair chance of passing a cost-benefit test. The unfortunate corollary, however, is that, in practice, an environmental regulation that does *not* avert a significant number of quantified human deaths stands a poor chance of passing a cost-benefit test.

We can see this dynamic at work by comparing the cost-benefit fates of air pollution rules to those of rules on water pollution and toxic substances. Most recent air pollution rules, no matter what their direct pollution target is, have also reduced particulate matter pollution. Particulate matter kills people, in significant numbers. These quantified deaths multiplied by the ten million dollar per life saved price tag I have discussed allow most air pollution rules to quite handily pass a cost-benefit test.

In fact, in twenty years of compiling reports on cost-benefit analyses done by administrative agencies, OMB has found that all major air pollution rules, save three, have passed a cost-benefit test. Yet few water pollution rules have even made it out of OIRA, and those few that have made it out have done so despite mostly failing the cost-benefit test. The same goes for rules on toxic substances. The reason is that the EPA has not, for the most part, linked water pollution to quantified human deaths. And any quantified human deaths associated with toxic substances are typically deaths from cancer—deaths that typically occur after a long latency period and thus whose value is severely shrunk by application of discounting (a technique I will discuss in a moment).

By making environmental rules pass a cost-benefit test, presidents have in practice substantially tilted the regulatory field in favor of air

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[17] Lisa Heinzerling, *Quality Control: A Reply to Professor Sunstein*, 102 CALIF. L. REV. 1457, 1465 (2014).

[18] *Id.* at 1466.

pollution rules, specifically air pollution rules that reduce particulate matter, and against rules aimed at water pollution and toxic substances.

Even when the hurdles of quantification and monetization can be overcome, a third standard feature of economic analysis presents yet another obstacle to environmental protection. Cost-benefit analysts insist upon discounting future benefits to present value. Discounting is, effectively, compound interest in reverse. It applies rates of return on financial investments backwards to the present day from the moment in the future when the benefits are expected to occur. However, instead of magically enlarging a small amount of money today into a gigantic amount of money in the future, as compound interest does, discounting magically shrinks a gigantic amount of benefits in the future into a trivial amount of benefits today. This step in cost-benefit analysis has the effect of greatly shrinking the perceived benefits of policies that address future harms—which is exactly what many, if not most, environmental policies aim to do.

Through quantification, monetization, and discounting, cost-benefit analysis loads the dice against protective environmental policies. Although we are often told that cost-benefit analysis is the only rational way to approach important decisions, and that the "science" of economic analysis demands the kinds of anti-regulatory techniques I have described, in fact cost-benefit analysis has embedded within it large and contestable choices about values. Discounting, for example, makes a brute force assumption that the future is simply not worth very much to us. Yet the relative worth of the present and the future is a choice of profound moral significance. The operation of discounting seems technical, but the choices embedded within it are profound.

I have spent quite a few of my years as an academic propounding this critique of cost-benefit analysis. If you want to read more about it, you can check out my book with economist Frank Ackerman, *Priceless: On Knowing the Price of Everything and the Value of Nothing*.[19] Despite this critique, cost-benefit analysis of environmental policy has not only survived; it has flourished, as I earlier discussed. And in fact, several years after *Priceless* was published, in a strange and wonderful twist of fate, I found myself in the surprising position of running the EPA office that oversees economic analysis within the agency. In the first two years of the Obama administration, first as an advisor to EPA Administrator Lisa Jackson and then as Associate Administrator of the Office of Policy, I oversaw the production of the kinds of economic analyses I had spent so much time criticizing.

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19 ACKERMAN & HEINZERLING, *supra* note 14.

Within days after entering office, President Obama issued a presidential memorandum that directed the Director of the Office of Management and Budget to consult with representatives of the regulatory agencies and make recommendations to the president for a new executive order on regulatory review.[20] President Obama's memorandum noted that a lot had been learned since 1993, when Clinton's executive order was issued, about both the substance of regulation and about how to improve the process of regulatory review. "In this time of fundamental transformation," President Obama declared, "that process—and the principles governing regulation in general—should be revisited."[21]

Agencies and the public responded with enthusiasm. Many endorsed the idea of remaking the process and substance of regulatory review. They offered comments about how to do this. Then they waited. Within the EPA, I found myself having to explain, over and over, that while we waited to see what the president would do to remake the process of regulatory review, the framework set in the Clinton-era executive order still governed our work. That framework, as I've noted, required major rules to be reviewed and approved by the White House. It required the most important rules to be accompanied by a cost-benefit analysis.

When, two years into his first term, President Obama finally produced an executive order on regulatory review, it disappointed those who had hoped for a change from prior practice. The executive order, in significant part, simply repeated—often word for word—the process and substance of Clinton's executive order.[22] In fact, it left Clinton's executive order in place. OIRA remained the president's designated gatekeeper for all major rules, and cost-benefit analysis remained the official decision-making criterion.

Moreover, the Obama White House exerted forceful, and sometimes picayune, control over the work of the environmental agencies. If the White House designee for regulatory review—OIRA—wanted to review any of EPA's regulatory initiatives, OIRA reviewed them. Although the Clinton-era executive order, by its terms, applies only to regulations, OIRA also reviewed any guidance documents they wanted to see. OIRA also took an expansive view of the kinds of regulatory actions that warranted OIRA review; any regulatory action OIRA wanted to see was perforce, in the words of the Clinton-era executive order on regulatory review, a "novel legal or policy" matter that justified OIRA review.

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20 Memorandum on Regulatory Review, 2009 Daily Comp. Pres. Doc. (Jan. 30, 2009), https://www.govinfo.gov/content/pkg/DCPD-200900287/pdf/DCPD-200900287.pdf.

21 *Id.*

22 Exec. Order No. 13563, 3 C.F.R. § 215 (2011).

Agencies were also pressed to interpret the statutes they administered to embrace a cost-benefit test.

Beyond regulatory actions, OIRA staff took it upon themselves to reach deep into EPA's civil service apparatus, watching EPA's web page and outside publications for any hint that EPA was up to something that OIRA had not weighed in on. Even talks by career civil servants at professional conferences could inspire scolding phone calls about EPA's actions and positions. Political operatives at the White House and within the agency also controlled civil servants' interactions with the media, requiring press office "minders" for interviews with reporters. Leaks to the press were simply not on.

In addition, the Obama administration took the cost-benefit desideratum extremely seriously. After he left office as President Obama's first head of OIRA, Professor Cass Sunstein wrote a book on his experience.[23] He observed that if a rule got into trouble at OIRA, it was usually because it had failed the cost-benefit test.[24] As a result of this test, as I have noted, rules on water pollution and toxic chemicals fare poorly. These rules lack the silver bullet that has come to dominate cost-benefit analyses of air pollution rules: they do not reduce particulate matter. The cost-benefit test, as I've said, favors air pollution rules over other kinds of environmental rules. The Obama administration was willing to let certain kinds of environmental regulations go by the board—specifically, regulations targeting water pollution and toxic chemicals—if they did not have positive cost-benefit profiles.

Even where specific kinds of environmental regulation were consistent with overall administration policy, the Obama administration embraced the traditional features of cost-benefit analysis that would undercut such rules.

Consider the Obama administration's approach to climate change and discounting. Early on, the Obama administration convened an interagency working group to develop a social cost of carbon. The social cost of carbon is, as this group described it, "the monetized damages associated with an incremental increase in carbon emissions in a given year."[25] This figure is, the group wrote, "intended to include (but is not limited to) changes in net agricultural productivity, human health, property damages from increased

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23 CASS R. SUNSTEIN, SIMPLER: THE FUTURE OF GOVERNMENT (2013).

24 *Id.* at 161.

25 INTERAGENCY WORKING GROUP ON SOCIAL COST OF CARBON, UNITED STATES GOVERNMENT, TECHNICAL SUPPORT DOCUMENT: SOCIAL COST OF CARBON FOR REGULATORY IMPACT ANALYSIS UNDER EXECUTIVE ORDER 12866 1 (Feb. 2010), https://www.epa.gov/sites/production/files/2016-12/documents/scc_tsd_2010.pdf.

flood risk, and the value of ecosystem services due to climate change."[26] The analysis of the social cost of carbon looked out almost three hundred years into the future, through the year 2300, and tried to encapsulate the consequences of the accumulation of carbon dioxide in the atmosphere for human health and welfare in a single metric .

Discounting played a gigantic role in this analysis due to the very long time frames involved. In setting a social cost of carbon to be used in federal cost-benefit analyses, the Obama administration picked a range of 2.5 to five percent for the discount rate, with a central value of three percent.[27] The choice of a discount rate had enormous consequences. Indeed, in some of the scenarios employing a five percent discount rate, the social *cost* of carbon actually turned into a social *benefit*, reflecting overall benefits rather than costs from climate change. The idea that carbon dioxide was actually *good* for us over the long-term was inconsistent with the thrust of the scientific evidence on the adverse and possibly catastrophic effects of climate change. Yet, in these scenarios, the Obama administration embraced the economic logic of discounting over the scientific evidence of emerging catastrophe. Even in the scenarios using lower discount rates, the rates used—2.5 and three percent—were high enough to have profound effects on the perceived benefit of reducing carbon dioxide emissions.

Thus, when President Obama left office, he left for the new president a legacy of presidential control over both specific regulatory and interpretive choices as well as a tradition of enthusiasm for a particular kind of economic analysis and its equity-blind criterion of efficiency. President Obama handed to his successor, undiminished, a tradition of presidential control over environmental policy in which the control was exercised by embedding a particular economic theory in the day-to-day operations of the environmental agencies.

In President Trump's hands, this legacy has become a one-way road to environmental destruction. President Trump has exercised broad and extensive control over the environmental agencies. He has, through executive order, instructed the agencies to revisit just about every major environmental initiative of the Obama administration.[28] His political appointees in the agencies have retaliated against career civil servants deemed hostile to his political agenda. The agencies have proposed to revoke numerous environmental rules not only by explaining that they are

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26 *Id*.

27 *Id.*

28 For a catalog of EPA deregulatory actions in the Trump administration, see *EPA Deregulatory Actions*, EPA, https://www.epa.gov/laws-regulations/epa-deregulatory-actions.

not consistent with the policies of this administration but also by claiming that the relevant agencies actually never had the statutory authority to issue them in the first place. In other words, as has happened with every other presidential administration since Richard Nixon, this administration has tightened the president's control over regulatory policy.

This administration has changed course, however, with respect to the nature of the economic analysis it deploys. President Trump has not revoked the Clinton-era executive order on White House regulatory review, and in this administration OIRA has reviewed numerous agency rules under the umbrella of this longstanding order. Yet the nature of economic analysis has changed significantly. In this administration, cost-benefit analysis has mutated into what I call "cost-nothing" analysis. In cost-nothing analysis, only costs—and not benefits—count, and the analysis proceeds on the assumption that we lose nothing when we abandon policies aimed at protecting human health and the environment.

One can see this species of analysis most clearly in President Trump's Executive Order 13771, called "Reducing Regulation and Controlling Regulatory Costs."[29] This executive order, known for good reason as the "2 for 1" order, instructed agencies to revoke two existing rules for every new rule they issue.[30] The order also instructed OMB to set "regulatory budgets" for the agencies—budgets that set a limit not on the public funds that agencies have available to them, but on the private expenditures that agencies may require—by imposing regulatory requirements on them.[31] For fiscal year 2019, OMB has set regulatory budgets for the agencies that are either zero or negative—meaning that in order to issue new rules with new regulatory costs, agencies must offset the new costs by undoing existing rules, often on a more than one-to-one basis.[32]

The only considerations of relevance to the agencies' regulatory budgets are the costs that regulations impose on regulated entities. Irrelevant to this analysis are the benefits of regulations. Thus has cost-benefit analysis mutated, by executive directive, into cost-nothing analysis.

The mutation of cost-benefit into cost-nothing has spread to agencies' public explanations for their regulatory decisions. A fundamental principle of administrative law is that agencies must explain, in reasoned terms, their

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29 Exec. Order No. 13771, 82 Fed. Reg. 9339 (Feb. 3, 2017).

30 *Id.* at §§ 1, 2(a).

31 *Id.* at § 3(d) (instructing OMB Director to impose "total incremental cost allowance" on agencies).

32 OMB, REGULATORY REFORM: REGULATORY BUDGET FOR FISCAL YEAR 2019, https://www.reginfo.gov/public/pdf/eo13771/EO_13771_Regulatory_Budget_for_Fiscal_Year_2019.pdf.

decisions about regulations. They must explain their reasons for issuing new rules and for revoking or changing existing rules. In doing so, they may not ignore important aspects of the problems before them. And agencies must, according to the Supreme Court's decision in *Michigan v. EPA*, which I mentioned earlier, consider both the advantages and disadvantages of the paths they propose to pursue.

Here, too, the Trump administration has preferred cost-nothing analysis over a fair appraisal of the full consequences of its regulatory choices. In the early months of the administration, agencies delayed and suspended dozens of rules from the Obama administration, often with little more explanation than that the administration had changed hands. The one-sided analysis offered by the agencies was met with hostility in the courts; the administration lost many cases, involving a variety of regulatory actions, in which it attempted to delay or suspend existing rules without adequate explanation.[33] Likewise, in a number of important environmental cases, the administration lost partly because it refused to grapple with the human health or environmental consequences of its withdrawals of existing protections.

As the administration moves to the next phase of its deregulatory program, which involves the actual revocation of existing rules rather than their mere delay, it is not clear that it has come to grips with the lessons of these early judicial defeats. Agencies continue to lean heavily on the cost side of the equation and to ignore the benefits of the rules they propose to renounce. Recently, as the comment period for the administration's rollback of fuel efficiency standards came to a close, scores of organizations filed comments excoriating the almost-risibly-sloppy analysis on which the rollback was based.

Perhaps it is with judicial review in mind, therefore, that the administration has begun to engage in a wholesale effort to make the benefits of environmental regulation simply disappear. If there are no regulatory benefits, the courts cannot fault the agencies for ignoring them. Here, the administration proposes not simply to look the other way, but to wipe the benefits off the books completely.

The administration is accomplishing this disappearing act in several ways.

First, the administration is proposing to disregard scientific studies if the data behind those studies is not made available to the public. The data from the epidemiological studies that undergird many environmental standards often are intertwined with confidential patient information—

33 Lisa Heinzerling, *Laying Down the Law on Rule Delays*, REG. REV. (June 4, 2018), https://www.theregreview.org/2018/06/04/heinzerling-laying-down-law-rule-delays.

information that may not be publicly shared without violating rules for patient confidentiality. EPA has proposed to stop relying on such studies unless their underlying data is made publicly available.[34] A clear target of this proposal is the body of epidemiological evidence that supports the conclusion that particulate matter kills people and makes them sick. As I noted earlier, these quantified harms are the basis for the highly positive cost-benefit profiles of rules on air pollution. In a proposal cynically touting scientific "transparency," EPA has proposed actually to censor this scientific evidence. One way to make benefits disappear is simply to declare that the evidence showing benefits is inadmissible.

A second way the administration is making benefits disappear is by disregarding the co-benefits of regulatory decisions. Co-benefits, also known as ancillary benefits, are the positive consequences that flow from a regulation but that are not the direct aim of the regulation. In controlling the emissions of toxic substances like mercury and lead from power plants, for example, the control technologies that EPA requires also control the emissions of particulate matter. EPA has long counted these particulate matter co-benefits in its cost-benefit analyses. In fact, as I noted earlier, EPA's air pollution rules have had great success under cost-benefit analysis precisely because they often achieve reductions in particulate matter – even when this is not the direct goal of the rules.

In an advance notice of proposed rulemaking discussing potential changes to EPA's cost-benefit analyses, then-administrator Scott Pruitt called out the agency's longstanding reliance on co-benefits and indicated that this practice was ripe for change.[35] Following through on this idea, EPA has proposed to revoke its Obama-era finding that it is appropriate under the Clean Air Act to regulate toxic air emissions from power plants.[36] EPA was required to revisit this finding, which itself was required under the Clean Air Act, after the Supreme Court held in *Michigan v. EPA* that the agency had erred in declining to consider costs in deciding that regulation was appropriate.[37] After *Michigan v. EPA*, the Obama-era EPA found that regulation of power plants remained appropriate not only because of the considerable health risks posed by toxic air pollutants in their own right, but also because of the reductions in co-pollutants that

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34 Strengthening Transparency in Regulatory Science, 83 Fed. Reg. 18,768, 18,769 (Apr. 30, 2018) (to be codified at 40 C.F.R. pt. 30).

35 Increasing Transparency and Consistency in Considering Costs and Benefits in the Rulemaking Process, 83 Fed. Reg. 27,524, 27,526, 27,527 (proposed June 13, 2018).

36 National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Utility Steam Generating Units—Reconsideration of Supplemental Finding and Residual Risk and Technology Review, 84 Fed. Reg. 2,670, 2,670 (proposed Feb. 7, 2019) (to be codified at 40 C.F.R. pt. 63).

37 Michigan v. EPA, 135 S.Ct. 2699 (2015).

regulation would trigger.[38] Now, EPA is proposing to ignore these cost-benefits in determining whether regulation of mercury, lead, and other pollutants from power plants is appropriate under the Clean Air Act. This proposal conflicts with longstanding policy and practice, longstanding OMB guidance on cost-benefit analysis, and pure common sense.

The current administration is erasing benefits in another way as well. In developing the social cost of carbon in the Obama administration, an interagency working group focused not only on the effects of climate change in this country but also on its effects elsewhere in the world.[39] The idea was that climate change is a global problem and that effects that occur elsewhere in the world also affect us here at home. By contrast, the Trump administration has chosen to ignore the global consequences of climate change and instead focus only on domestic effects. The administration has also chosen discount rates for its social cost of carbon that are even steeper than those embraced by the Obama administration. Benefits of addressing climate change are, in other words, being erased by ignoring global consequences and future harms that affect us all.

The Trump administration has thus employed a two-part economic strategy for defending deregulation. It has, by sheer brute force, delayed or proposed to revoke existing rules by simply citing the costs of regulation while dismissing the benefits. It has also set about making the erasure of these benefits official government policy. In these ways, it is transforming cost-benefit analysis into cost-nothing analysis.

I regard these as highly unfortunate developments, and let me stress that the specific form of these developments has been distinctive to the current administration. But I would like to close by identifying the relationship between current developments and past practices.

For decades, we have watched as each president we elect accretes more power to himself and to his aides in the White House. We have watched as presidents have asserted ever greater authority to micromanage decisions statutorily committed to other executive branch officers and institutions. We have watched as presidents, in the face of statutes embracing other decision-making criteria, have embraced economic efficiency as *the* desideratum of all regulatory policy. We have watched as certain environmental problems, such as water pollution and exposure to toxic substances, have festered because rules addressing them have failed

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38 Supplemental Finding That It Is Appropriate and Necessary to Regulate Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units, 81 Fed. Reg. 24,420, 24,426–27, 24,337–441 (proposed Apr. 25, 2016) (to be codified at 40 C.F.R. pt. 63).

39 INTERAGENCY WORKING GROUP ON SOCIAL COST OF CARBON, *supra* note 25, at 10–11.

the cost-benefit test. We have watched, without any apparent curiosity or alarm, as the reduction of particulate matter in the air has become the core driver of regulatory policy concerning the environment—as if it is the only environmental problem we have.

We could watch the unraveling of environmental policy at this moment and simply respond that the administration has gotten its economic analysis wrong: it has ignored the benefits side of the regulatory equation and has proposed to erase categories of benefits that economic science recognizes. I believe the problem is deeper than this. The president simply has too much power—and has had too much power for decades. Ceding control to the president and his aides in the White House disrespects the delegations Congress has made to the agencies and to agency personnel. Likewise, the criterion of economic efficiency does not align with the mission of our environmental laws. And the technique of cost-benefit analysis has always—even before now—left too much on the cutting room floor, including consequences that cannot easily be counted and consequences that reach into the far future. Cost-benefit analysis has never been the environmentalist's friend. We can decry, as I do, the turn toward cost-nothing analysis, but we should also reckon with our longstanding tolerance of presidents' substitution of their own economic theories for the environmental imperatives our laws embrace.