

The Importance of Evaluating Regulatory “Co-Benefits”

FEBRUARY 2017

Virtually every regulation has collateral consequences, which can be positive or negative. A rule requiring more energy-efficient refrigerators, for example, might have the indirect benefit of improving air quality (because reducing electricity use will also reduce pollution from power plants). Conversely, a rule banning the use of one toxic chemical might have the indirect cost of increasing use of an equally toxic substitute. A regulator could not accurately assess whether such rules would do society more good than harm without taking these indirect effects into account. Accordingly, agencies typically strive to include all reasonably foreseeable effects in their cost-benefit analyses for proposed rules.

In recent years, however, opponents of environmental regulation have criticized the U.S. Environmental Protection Agency (EPA) for including indirect benefits in the cost-benefit analyses accompanying its rules. **These “co-benefits,” as the agency calls them, are typically pollution reductions that are not explicitly required by a regulation but that will nevertheless result from the technological or operational changes made to comply with the rule.** For example, EPA’s cost-benefit analysis for its Mercury and Air Toxics Standards took into account not only the reductions in mercury pollution from power plants that the rule directly required, but also co-benefits from reductions in particulate matter that the agency expected to occur as a positive side effect of the rule.

By considering a rule’s direct *and* indirect effects, a regulator can weigh all relevant information and act in the best interest of the public. Excluding some of this information could lead to economically irrational decisionmaking. Although critics would prefer that EPA ignore co-benefits, the agency’s **consideration of indirect regulatory effects is consistent with logic, law, scholarship, and decades of regulatory precedent.**¹

Courts have long required agencies to consider indirect costs, and there is no logical reason to treat indirect benefits differently.

Courts have repeatedly instructed agencies to consider indirect regulatory costs.² In *American Trucking Associations v. EPA*, for example, the United States Court of Appeals for the D.C. Circuit held that, when crafting a National Ambient Air Quality Standard that would reduce concentrations of ozone in the ambient air, EPA had to consider not only how the new standard would reduce tropospheric ozone's negative impacts on respiratory health, but also how it might reduce the pollutant's alleged positive health effects (as shielding from harmful ultraviolet rays), even though the latter effects were not the focus of the rule.³ Similarly, when EPA attempted to ban asbestos-based brakes under the Toxic Substances Control Act, the U.S. Court of Appeals for the Fifth Circuit held that the agency had to consider the indirect safety harm that could result from the use of substitute, non-asbestos brakes.⁴

Although these precedents focus on the consideration of indirect costs rather than indirect benefits, there is no logical reason for agencies to treat indirect benefits differently than indirect costs. **As the U.S. Court of Appeals for the Ninth Circuit recognized in a 2008 case, an agency that undervalues regulatory benefits and overvalues regulatory costs is “putting a thumb on the scale” of its regulatory analysis.**⁵ The terms “benefit” and “cost” are merely convenient labels for positive effects versus negative effects and do not reflect any distinction warranting different analytical treatment.⁶

Considering indirect benefits is consistent with executive guidance on cost-benefit analysis, as well as decades of regulatory precedent.

The executive orders governing regulatory review call for agencies to accurately measure the “actual results of regulatory requirements,” thereby implicitly requiring analysis of both direct and indirect costs and benefits.⁷ Additionally, **Circular A-4, a guidance document on regulatory analysis issued by the Office of Management and Budget under President George W. Bush, explicitly requires the consideration of indirect benefits.**⁸ In particular, the Circular instructs agencies to consider important indirect benefits, which include any “favorable impact . . . secondary to the statutory purpose of the rulemaking.”⁹ Circular A-4 stresses that “[t]he same standards of information and analysis quality that apply to direct benefits and costs should be applied to ancillary benefits and countervailing risks.”¹⁰ Finally, EPA's own cost-benefit guidelines, adopted after extensive peer review, likewise instruct the agency to assess “all identifiable costs and benefits,” including direct effects “as well as ancillary [indirect] benefits and costs.”¹¹

Moreover, **EPA—under presidents of both parties and across three decades—has consistently taken indirect benefits into account when evaluating Clean Air Act regulations.** For example, in 1987, EPA under President Reagan discussed the importance of considering the indirect benefits that would result from its regulation of toxic emissions from municipal waste combustors.¹² And in 1991, EPA under President George H.W. Bush justified performance standards for landfill gases partly by reference to “the ancillary benefit of reducing global loadings of methane.”¹³ Later, when establishing standards to address hazardous air pollutant emissions from pulp and paper producers, EPA under President Clinton analyzed indirect benefits from reductions in co-pollutants like volatile organic compounds, particulate matter, and carbon monoxide.¹⁴ And EPA under President George W. Bush acknowledged that its Clean Air Interstate Rule, though designed to control particulate matter and ozone, would also reduce mercury emissions,¹⁵ and included these indirect health and welfare benefits in its cost-benefit analysis justifying the rule.¹⁶

EPA does not “double count” indirect benefits.

Critics of EPA frequently make false claims that the agency’s inclusion of co-benefits in the evaluation of new rules results in “double-counting” benefits that were already included in past rules’ cost-benefit analyses. This is simply untrue. As EPA explains in its Guidelines for Preparing Economic Analyses, the agency assesses the benefits of its proposed regulations against a baseline emissions level that assumes “full compliance with existing and newly enacted (but not yet implemented) regulations.”¹⁷ As a result, **EPA analysis captures only “incremental economic effects of the new rule or policy without double counting benefits and costs captured by analyses performed for other rules.”**¹⁸

EPA properly considers reductions in particulate matter pollution beyond the level required by “National Ambient Air Quality Standards” as an indirect benefit of regulations aimed at reducing other types of pollution.

Under the Clean Air Act, EPA must set National Ambient Air Quality Standards for particulate matter at a level “requisite to protect the public health” with “an adequate margin of safety.”¹⁹ Some argue that the benefits of reducing particulate matter beyond these ambient standards are paltry or non-existent and that, as a result, EPA should not be able to count particulate matter reductions beyond its ambient standards as a co-benefit of regulations aimed at other pollutants. But this reflects a misunderstanding of the ambient standards’ stringency. As Justice Breyer of the Supreme Court has recognized, the ambient standards do not require the elimination of all health risks from covered pollutants.²⁰ Indeed, some pollutants pose health risks at *all* ambient concentrations.²¹

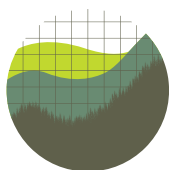
When it last revised the ambient standards for particular matter in 2013, EPA acknowledged the absence of a “discernible threshold,” for the pollutant’s negative health effects.²² Accordingly, **health risks from particulate matter remain even in areas that have attained the ambient standards, and further reductions in particulate matter yield real, incremental health benefits that are appropriately included in EPA’s cost-benefit analyses.**

Conclusion

Despite industry groups’ claims to the contrary, EPA’s inclusion of indirect benefits in its regulatory cost-benefit analyses is consistent with logic, law, scholarship, and decades of regulatory precedent. Furthermore, EPA’s cost-benefit analyses do not “double-count” indirect benefits that were already included in past analyses. Finally, EPA appropriately recognizes that reductions in particulate matter beyond the National Ambient Air Quality Standards have real health benefits, and it properly counts them as an indirect benefit of regulations aimed at other forms of pollution.

Endnotes

- ¹ The material in this fact sheet is largely drawn from Policy Integrity’s amicus brief in *Murray Energy Corp. v. EPA*, No. 16-1127 (D.C. Cir. 2017), which addressed EPA’s consideration of co-benefits in the cost-benefit analysis accompanying its 2012 Mercury and Air Toxics Standards.
- ² See Samuel J. Rascoff & Richard L. Revesz, *The Biases of Risk Tradeoff Analysis: Towards Parity in Environmental and Health-and-Safety Regulation*, 69 U. Chi. L. Rev. 1763, 1772–80 (2002).
- ³ *Am. Trucking Ass’ns v. EPA*, 175 F.3d 1027, 1051–52 (D.C. Cir. 1999) rev’d on other grounds sub nom. *Whitman v. Am. Trucking Ass’ns, Inc.*, 531 U.S. 457 (2001); see also *Corrosion Proof Fittings v. EPA*, 947 F.2d 1201, 1225 (5th Cir. 1991) (holding that EPA must consider the indirect safety effects of substitute options for car brakes when banning asbestos-based brakes under the Toxic Substances Control Act).
- ⁴ See *Corrosion Proof Fittings v. EPA*, 947 F.2d at 1225.
- ⁵ *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1198 (9th Cir. 2008).
- ⁶ Rascoff & Revesz, *supra* note 2, at 1793 (noting that indirect costs and indirect benefits are “simply mirror images of each other”).
- ⁷ Exec. Order No. 13,563 § 1, 76 Fed. Reg. 3821, 3821 (Jan. 21, 2011) (affirming Exec. Order No. 12,866); accord Exec. Order No. 12,866 § 6(a)(3)(C), 58 Fed. Reg. 51,735, 51,741 (Oct. 4, 1993) (detailing the requirements for cost-benefit analysis).
- ⁸ See OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, CIRCULAR A-4, REGULATORY ANALYSIS 26 (2003).
- ⁹ *Id.*
- ¹⁰ *Id.*
- ¹¹ EPA, GUIDELINES FOR PREPARING ECONOMIC ANALYSES 11-2 (2010).
- ¹² See 52 Fed. Reg. 25,399, 25,406 (July 7, 1987).
- ¹³ See 56 Fed. Reg. 24,468, 24,469 (May 30, 1991).
- ¹⁴ See 63 Fed. Reg. 18,504, 18,585–86 (Apr. 15, 1998).
- ¹⁵ See 70 Fed. Reg. 25,162, 25,170 (May 12, 2005).
- ¹⁶ See EPA, REGULATORY IMPACT ANALYSIS FOR THE FINAL CLEAN AIR INTERSTATE RULE 1-10 (2005).
- ¹⁷ EPA, *supra* note 11, at 5-9.
- ¹⁸ *Id.*
- ¹⁹ 42 U.S.C. § 7409(b)(1).
- ²⁰ See *Whitman v. Am. Trucking Ass’ns*, 531 U.S. 457, 494 (2001) (Breyer, J., concurring) (characterizing a zero-risk ambient standard as “impossible and undesirable”).
- ²¹ See Michael A. Livermore & Richard L. Revesz, *Rethinking Health-Based Environmental Standards*, 89 N.Y.U. L. Rev. 1184, 1186–87 (2014) (“Environmental pollutants often lack ambient concentrations below which there is no risk of negative health consequences. As a result, the complete elimination of health risks for these pollutants could be accomplished only by banning all emissions.”)
- ²² 78 Fed. Reg. 3086, 3161 (Jan. 15, 2013).



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