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The Appropriate Role of Costs in Environmental Regulation

Richard J. Pierce, Jr.*

In *Whitman v. American Trucking Associations (ATA)*, the Supreme Court held unanimously that "economic considerations [may] play no part in the promulgation of ambient air standards under section 109 of the CAA (Clean Air Act)."¹ The *ATA* opinion raises a host of difficult and important issues, e.g., what is the scope of the holding; how should agencies that fall within the scope of the holding make regulatory decisions; and, how should courts review agency decisions that fall within the scope of the holding? I will discuss some of those issues in this article.

In part I, I discuss the *ATA* opinion and the Environmental Protection Agency (EPA) actions that were the subject of that opinion. In part II, I discuss the scope of the holding. Prior to *ATA*, courts had interpreted only two provisions of regulatory statutes to preclude an agency from considering costs in any way.² Courts had interpreted the vast majority of provisions in regulatory statutes to permit agencies to consider costs in some manner in their decisionmaking. In some cases, the relevant language of the statutes clearly authorized, or required, agency consideration of costs. In many cases, however, courts interpreted statutory provisions to permit agencies to consider costs even though the relevant statutory language was either silent or

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¹ 121 S. Ct. 903, 908 (2001).

² Wendy E. Wagner, *The Science Charade in Toxic Risk Regulation*, 95 Colum. L. Rev. 1613, 1667-68 (1995).

ambiguous with respect to the appropriate treatment of costs. In those cases, the courts used one or more canons of construction to support a holding that ambiguous statutory language should be interpreted to authorize agencies to consider costs.³ I explore several related statutory interpretation questions raised by *ATA*, e.g., do any of the prior canonical approaches to regulatory statutes survive *ATA*, or does that opinion create a new canon of construction that will have the effect of prohibiting many agencies from considering costs in many circumstances? I conclude that courts should apply neither a pro-cost canon nor an anti-cost canon, but that they should assume that Congress has permitted an agency to consider any factor that is logically relevant to a decision unless Congress has clearly prohibited the agency from considering a particular decisional factor.

In part III, I ask what a court should do when it is required to review a regulatory decision made by an agency that is not allowed to consider costs in any way. I focus on a particular subset of agency decisions that is typified by the two EPA decisions that were at issue in *ATA* -- decisions to establish maximum permissible concentration levels for substances that appear to have no threshold below which they have no serious adverse effects on human health and that appear to be characterized by linear dose-response curves. In that important context, I conclude that a court often will have no choice but to reverse and remand an agency decision as arbitrary and capricious if the agency is prohibited from explaining its decision with reference to its consideration of costs.

In part IV, I discuss a series of questions that EPA, and potentially other agencies, must

³ See cases cited in notes 56-57, 62, 66 *infra*.

address in the wake of *ATA*. The Court declared that section 109 "bars cost considerations"⁴, and it stated that any agency decision would have to be vacated if a petitioner "proved" that the EPA Administrator considered costs in making the decision.⁵ The Court's statements raise many important questions, e.g., can agency staff members, Advisory Committee members, and /or the President consider costs in playing their respective roles in the agency decisionmaking process? If so, the decision of the Administrator will reflect consideration of costs even if the Administrator does not directly consider costs, since she can, must, and will consider the views of her staff, the Advisory Committee, and the President when she makes her decision.⁶ I next ask what would qualify as "proof" that an Administrator illegally considered costs in making a decision? I suggest that the Court will never allow a petitioner to "prove" what all participants in this decisionmaking process know – the EPA Administrator always considers costs in making decisions pursuant to CAA section 109. This suggests the possibility that EPA might be able to defend its actions to the satisfaction of a court by referring to the recommendations of third parties who considered costs. Finally, I ask whether the Administrator can consider costs in the form of the direct or indirect adverse health effects of a more stringent standard. I argue that she should be permitted to consider the public health costs of a more stringent standard even if she is prohibited from considering the economic costs of a more stringent standard. If the Administrator is permitted to balance health costs against health costs, she may be able to provide rational explanations for her decisions in a manner that is consistent with the Court's prohibition on her consideration of the

⁴ 121 S. Ct. at 911.

⁵ 121 S. Ct. at 911 n. 4.

⁶ See text at notes 146-161 *infra*.

economic costs of her decisions.

I. THE *AMERICAN TRUCKING ASSOCIATIONS* CASE

The Court's 2001 opinions in *ATA*⁷ addressed three issues that were raised by the D.C. Circuit in 1999.⁸ The D.C. Circuit opinions, in turn, addressed several issues that were raised by two rules issued by EPA in 1997.⁹ In this part of the article, I will summarize the most important elements of the Supreme Court's opinions and the D.C. Circuit's opinions. I will also describe the most important characteristics of the two EPA actions that were the subject of those opinions. I will expand on those initial descriptions in later parts of the article to the extent that more expansive descriptions are required to understand the questions addressed in those parts.

A. The *ATA* Opinions

Justice Scalia's opinion for a unanimous Court resolved three issues. The Court reversed the D.C. Circuit in one respect: by holding that EPA's interpretation of CAA section 109 does not violate the nondelegation doctrine.¹⁰ It affirmed the D.C. Circuit in two respects: by holding that EPA's method of implementing its new ozone standard is unlawful¹¹ and by holding that CAA section 109 prohibits EPA from considering costs when it sets national ambient air quality

⁷ 121 S. Ct. 903.

⁸ 175 F. 3d 1027, reh en banc denied, 195 F. 3d 4 (D.C. Cir. 1999).

⁹ National Ambient Air Quality Standards for Particulate Matters, 62 Fed. Reg. 38652 (1997) [hereinafter PM Standard]; National Ambient Air Quality Standards for Ozone, 62 Fed. Reg. 38856 (1997)[hereinafter Ozone Standard].

¹⁰ 121 S. Ct. at 911-914.

¹¹ Id. at 914-919.

standards.¹² I will discuss only issues that are raised by the last holding. Four Justices wrote three concurring opinions,¹³ but only Justice Breyer addressed the potential role of costs in setting air quality standards.¹⁴

Justice Scalia began his opinion by suggesting that the Court might be able to resolve the statutory interpretation issue simply by applying the plain meaning rule.¹⁵ Section 109 instructs EPA to set air quality standards that "are requisite to protect the public health" with "an adequate margin of safety."¹⁶ Justice Scalia "thought it fairly clear that this text does not permit the EPA to consider costs in setting the standards."¹⁷ He then conceded, however, that the dictionary definitions of "public health," "requisite," and "adequate margin" include some meanings that would allow EPA to consider costs.¹⁸ He rejected use of any of those definitions, however, because "it [is] implausible that Congress would give to the EPA through these modest words the power to determine whether implementation costs should moderate national air quality standards."¹⁹

Justice Scalia seemed to announce and to apply a new canon of construction in the process

¹² Id. at 908-914.

¹³ Id. at 919-924.

¹⁴ Id. at 921-924.

¹⁵ Id. at 908.

¹⁶ 42 U.S.C. §7409(a).

¹⁷ 121 S. Ct. at 908.

¹⁸ Id. at 908-910.

¹⁹ Id. at 910.

of rejecting the argument that EPA could consider costs -- an agency can consider costs only if Congress has clearly authorized it to do so. He said that "to prevail . . . respondents must show a textual commitment . . . to the EPA to consider costs" ²⁰ Moreover, "that textual commitment must be a clear one." ²¹ Since Justice Scalia found no such "clear" "textual commitment," he concluded that section 109 "bars cost considerations." ²²

Justice Breyer concurred with Justice Scalia's interpretation of section 109, but he did so on an entirely different basis. ²³ He expressed the view that the statutory language alone was insufficient to bar EPA from considering costs, and he rejected Justice Scalia's assertion that an agency can consider costs only if Congress has made a "clear" "textual commitment" to consider costs. ²⁴ Instead, Justice Breyer would "read silences or ambiguities in the language of regulatory statutes as permitting, not forbidding, this kind of rational regulation", i.e., regulation that is based on consideration of costs. ²⁵ Ultimately, however, Justice Breyer was persuaded by the statute's legislative history that Congress intended to prohibit EPA from considering costs in setting air quality standards. ²⁶

The Court's opinion is highly abstract and devoid of any discussion of the practicalities of

²⁰ Id. at 909.

²¹ Id. at 909.

²² Id. at 911.

²³ Id. at 921.

²⁴ Id. at 921.

²⁵ Id. at 921.

²⁶ Id. at 921-922.

its implementation. Thus, for instance, the Court told us nothing about the manner in which EPA made the two decisions at issue, the manner in which EPA can, or should, make such decisions in the future, or how it can make such decisions without considering costs in any way. The Court also said nothing about how a court can, or should, review such an agency decision to determine whether it is arbitrary and capricious.

B. The EPA Rulemakings

The *ATA* opinion was precipitated by two rules in which EPA announced new ambient air standards applicable to particulate matter (PM) and ozone.²⁷ The new ozone standard permits a maximum concentration of 0.08 parts per million (ppm) versus the pre-existing maximum permissible concentration of 0.12 ppm.²⁸ The new PM standard controls particles as small as 2.5 microns versus the pre-existing standard that applied only to particles as small as 10 microns.²⁹ EPA also increased the stringency of the PM standard by changing the basis for measuring the maximum permissible concentration of PM and by decreasing the maximum permissible concentration of PM in a 24-hour period.³⁰ EPA based the new, more stringent standards on over one hundred recent studies that found that ozone and PM were continuing to produce severe adverse health effects, including death, even in areas that were in compliance with the pre-existing standards.³¹ EPA solicited and received comments on those studies and their regulatory

²⁷ 62 Fed. Reg. 38652; 62 Fed. Reg. 38856.

²⁸ 62 Fed. Reg. 38868.

²⁹ 62 Fed. Reg. 38677, 38679.

³⁰ 62 Fed. Reg. 38373, 38894.

³¹ 62 Fed. Reg. 38653, 38709-11, 38894.

implications from over 100,000 parties.³² The resulting rulemaking records were over one million pages long. EPA explained the bases for its new standards in statements of basis and purpose that were hundreds of pages long.³³

Ozone and PM have two important characteristics in common. Both are believed to be non-threshold pollutants that are subject to linear dose-response curves.³⁴ That means that, based on the best scientific evidence available at present, both substances seem to produce adverse health effects at any concentration level above zero, and the magnitude of those adverse effects appear to be proportionate to the concentration of the substance to which people are exposed. It bears emphasis, however, that our present knowledge of the characteristics of both substances is limited and is subject to a high degree of uncertainty. Over time, we might discover that either substance has a threshold below which it causes no harm and that either has a convex or concave dose-response curve. Both the EPA staff and its Scientific Advisory Committee concluded, however, that the best interpretations of the presently available data support assumptions of no zero-harm thresholds and linear dose-response curves for both substances.³⁵

The D.C. Circuit accepted the EPA's characterization of the adverse public health effects of ozone and PM.³⁶ The D.C. Circuit majority was extremely troubled, however, by the combined effect of those characteristics and of EPA's claim that it did not consider costs in any way when it

³² 62 Fed. Reg. 38654; 62 Fed. Reg. 38858.

³³ 62 Fed. Reg. 38652; 62 Fed. Reg. 38856.

³⁴ 61 Fed. Reg. 65637, 65641-65643, 65651-65653, 65716, 65725; 62 Fed. Reg. 38652, 38656; 62 Fed. Reg. 38863-38865.

³⁵ See sources cited in note 34 supra.

³⁶ *American Trucking Associations v. EPA*, 175 F.3d 1027, 1033-1035.

announced the new maximum permissible concentrations of ozone and PM. Without considering costs, the majority could not understand how EPA decided "how much is too much."³⁷ If EPA believes that ozone and PM harm the public health at every concentration level, and that each additional increment of either produces about the same amount of adverse effects on public health, it would seem to follow logically that EPA should set the maximum permissible concentration of each at zero if EPA does not consider costs in any way.³⁸ In any event, the court could not understand why EPA set the standards at the concentration levels it announced rather than at lower levels that obviously would protect the public health more effectively than the levels it chose.³⁹ A dissenting judge expressed the view that EPA had adequately explained its decisions.⁴⁰

Usually, a court reverses an agency action as arbitrary and capricious if the agency's explanation for its action is inadequate to allow the court to understand why the agency acted as it did.⁴¹ Inexplicably, however, the D.C. Circuit did not address the arbitrary and capricious issue. Instead, it used its inability to understand the basis for the EPA decisions to support its radical and unprecedented holding that section 109 of the CAA is unconstitutional.⁴² The

³⁷ Id. at 1034.

³⁸ Id. at 1037.

³⁹ Id. at 1036.

⁴⁰ Id. at 1057.

⁴¹ See Richard J. Pierce, Jr., I Administrative Law Treatise §7.4 (4th ed. 2001).

⁴² 175 F.3d at 1036-1038. See discussion in Richard J. Pierce, Jr., The Inherent Limits on Judicial Control of Agency Discretion: The D.C. Circuit and the Nondelegation Doctrine, 52 Admin. L. Rev. 63 (2000).

Supreme Court unanimously reversed that holding,⁴³ but neither court addressed the arbitrary and capricious issue. At oral argument, several Justices raised the arbitrary and capricious issue with counsel for EPA in ways that suggested that those Justices shared the D.C. Circuit's bewilderment with respect to the basis for EPA's decisions.⁴⁴ The Justices dropped the issue, however, when counsel for EPA reminded them that the arbitrary and capricious issue was not before the Court.⁴⁵ As a result, neither court addressed that issue in any way, even though both the judges and the Justices appeared to find the issue difficult and puzzling.

While ozone and PM appear to share two important characteristics – no zero-harm threshold and a linear dose-response curve -- they differ significantly in other important respects. Generally, PM causes much greater damage to public health than does ozone. Thus, for instance, EPA estimated that the more stringent PM standard it announced would save about 10,000 lives per year,⁴⁶ while the more stringent ozone standard would yield the more modest benefit of reducing the incidence of serious respiratory distress suffered by asthmatics by tens of thousands of cases per year.⁴⁷

Even though EPA denied that it considered economics in any way in choosing the new

⁴³ 121 S. Ct. at 911-914.

⁴⁴ *Browner v. American Trucking Associations*, No. 99-1257, Supreme Court Transcript, pages 14-20 (Nov. 7, 2000).

⁴⁵ *Id.* at page 20.

⁴⁶ EPA Regulatory Impact Analyses for the Particulate Matter and Ozone National Ambient Air Quality Standards and Proposed Regional Haze Rule ES-17 to 18 [hereinafter RIA] (estimating that each increment of reduction in, or exposure to, PM concentrations would save 3700 to 17,900 lives per year). See also 61 Fed. Reg. 65641-65643; 62 Fed Reg. 38653.

⁴⁷ 61 Fed. Reg. 65716, 65725; 62 Fed. Reg. 38865.

PM and ozone standards, the two rulemaking records included extensive treatments of economic issues. By the time EPA solicited public comments on its proposed new standards, EPA had published and placed on its website a 718-page analysis of the estimated costs and benefits of the two proposed rules.⁴⁸ Many parties submitted comments on that study. Some parties commissioned and submitted competing studies that purported to demonstrate that EPA had underestimated the costs and overestimated the benefits of its proposed rules.⁴⁹ The Office of Management and Budget, the President's Council of Economic Advisors, the Department of Energy, and the House Committees with oversight responsibility for EPA also became actively involved in the highly visible public debate about the costs and benefits of EPA's proposed rules.⁵⁰ EPA made significant changes in its draft cost-benefit-analysis in response to the comments and

⁴⁸ RIA. See also 62 Fed. Reg. 38856; 62 Fed. Reg. 38652.

⁴⁹ See, e.g., Randall Lutter, *Is EPA's Ozone Standard Feasible?* Joint Center for Regulatory Studies (Dec. 1999); Stephen Huebner & Kenneth Chilton, *EPA's Case for New Ozone and Particulate Standards: Would Americans Get Their Money's Worth?* Center for the Study of American Business Policy, Study 27 (1997); Mercatus Center, *Comments on NAAQS for PM* (Mar. 12, 1997); Mercatus Center, *Comments on NAAQS for Ozone* (Mar. 12, 1997); Anne E. Smith, et al., *Costs, Economic Impacts, and Benefits of EPA's Ozone and Particulate Standards*, Reason Public Policy Institute 15 (June 1997); Brobeck, Phleger & Harrison, *Science and the High Cost of Cleaner Air* (Oct. 19, 1997).

⁵⁰ See, e.g., Memorandum from Alicia Munell, President's Council of Economic Advisors, to Art Frass, Office of Management and Budget (Dec. 13, 1996); EPA's Rulemakings on the National Ambient Air Quality Standards for Particulate Matter and Ozone: Hearings Before the Subcomm. on Commercial and Admin. Law of the House Comm. on the Judiciary, 105th Cong. 89 (1997); Hearings Before the Subcomm. on Oversight and Investigations of the House Comm. on Health and Env't, 105th Cong. (Apr. 10, 1997); Statement of Marvin Frazier, DOE Office of Health & Environmental Research, Before EPA Clean Air Scientific Advisory Committee (Mar. 21, 1995).

criticisms it received.⁵¹ At the end of the decisionmaking process, however, EPA announced that it had ignored all of the data and public debate about the costs and benefits of its proposed rules, including its own economic analysis of the rules, even though the final standards EPA chose happened to fall in the range in which EPA's economic analysis showed that the estimated benefits of the two rules exceeded their estimated costs by several billion dollars.⁵²

II. THE SCOPE OF THE HOLDING

Prior to *ATA*, courts had interpreted all but two provisions of regulatory statutes to permit an agency to consider costs in some way in making decisions.⁵³ In some cases, the relevant statutory language clearly authorized the agency to consider costs, but in many cases, the statute was silent or ambiguous on that issue. The language of many of the statutes that had been interpreted to permit consideration of costs is remarkably similar to the language of CAA section 109 that the *ATA* Court held to bar consideration of costs. Thus, for instance, courts have held that an agency can consider costs when it decides whether an air quality standard provides an "ample margin of safety"⁵⁴ and when it decides whether pollutants from one state "contribute significantly"⁵⁵ to another state's inability to comply with a federal clean air standard.

A. The Pro-Cost Canon

⁵¹ See detailed analysis in Brief of Cross-Petitioner Chamber of Commerce of the United States in *American Trucking Associations v. Browner*, Supreme Court No. 99-1426, pp. 10-28 (July 21, 2000).

⁵² RIA at ES-12 to -22.

⁵³ Wagner, *supra*. note 2, at 1667-1668.

⁵⁴ *NRDC v. EPA*, 824 F.2d 1146 (D.C. Cir. en banc 1987).

⁵⁵ *Michigan v. EPA*, 213 F.3d 663 (D.C. Cir. 2000).

Prior to *ATA*, courts had interpreted all ambiguous provisions of regulatory statutes to authorize consideration of costs by applying one or both of two canons of construction. The first of those canons had its origin in a 1987 en banc decision of the D.C. Circuit -- a provision of a regulatory statute will be construed to bar an agency from considering costs only if "there is clear congressional intent to preclude consideration of costs."⁵⁶ Courts have since applied that canon consistently in a long line of cases.⁵⁷ For convenience, I will call it the pro-cost canon.

The proponents of the pro-cost canon includes scores of scholars whose names read like a list of who's who in administrative law and regulatory economics.⁵⁸ Each of the last seven

⁵⁶ *NRDC v. EPA*, 824 F.2d 1146, 1163.

⁵⁷ E.g., *Allied Local & Regional Manufacturers Caucus v. EPA*, 215 F.3d 61, 78 (D.C. Cir. 2000); *Michigan v. EPA*, 213 F.3d 663, 678 (D.C. Cir. 2000); *George E. Warren Corp. v. EPA*, 159 F.3d 616, 622-624 (D.C. Cir. 1998); *Grand Canyon Air Tour Coalition v. FAA*, 154 F.3d 455, 475 (D.C. Cir. 1998); *NRDC v. EPA*, 937 F.2d 641, 643-646 (D.C. Cir. 1991).

⁵⁸ Brief Amici Curiae of Gary E. Marchant, Cary Coglianese, Daniel M. Byrd III, Gail Charnley, Maureen L. Cropper, E. Donald Elliott, David L. Paigman, James K. Hammitt, James E. Krier, William A. Lash III, Roger D. McClellan, Thomas W. Merrill, Lars Noah, Joyce E. Penner, Robert Phaler, Jeffrey J. Rachlinski, Joseph Sanders, Robert N. Stavins, Jonathan B. Wiener and James D. Wilson in Support of Respondents, in *Browner v. American Trucking Associations*, Supreme Court No. 99-1257 (Sep. 11, 2000); Brief Amici Curiae of AEI-Brookings Joint Center for Regulatory Studies, Kenneth J. Arrow, Elizabeth E. Bailey, William J. Baumol, Jagdish Bhagwati, Michael J. Boskin, David F. Bradford, Robert W. Crandall, Maureen L. Cropper, Christopher C. Demuth, George C. Eads, Milton Friedman, John D. Graham, Wendy L. Gramm, Robert W. Hahn, Paul L. Joskow, Alfred E. Kahn, Paul R. Krugman, Lester B. Lave, Robert E. Litan, Randall W. Lutter, Paul W. Macavoy, Paul W. McCracken, James C. Miller III, William A. Niskanen, William D. Nordhaus, Wallace E. Oates, Peter Passell, Sam Peltzman, Paul R. Portney, Alice M. Rivlin, Milton Russell, Richard L. Schmalensee, Charles L. Schultze, V. Kerry Smith, Robert M. Solow, Robert N. Stavins, Joseph E. Stiglitz, Laura D'Andrea Tyson, W. Kip Viscusi, Murray L. Weidenbaum, Janet L. Yellen, and Richard J. Zeckhauser in Support of Cross-Petitioners in *American Trucking Associations v. Browner*, Supreme Court No. 99-1426 (July 21, 2000); I Pierce, *supra*. note 41, at 453-455; Stephen G. Breyer, Richard B. Stewart, Cass R. Sunstein & Matthew L. Spitzer, *Administrative Law & Regulatory Policy* 65 (4th ed. 1999); Richard B. Stewart, *Regulatory Jurisprudence: Canons Redux?* 79 *Cal. L. Rev.* 807, 817 *L. Rev.* 405, 487 (1989). (1991); Cass R. Sunstein, *Interpreting Statutes in the Administrative*

Presidents has also endorsed the fundamental principle that agencies should consider costs in making all major decisions.⁵⁹ Presidents, judges, and scholars have supported the pro-cost canon with arguments that are simple and compelling. All individuals and institutions naturally and instinctively consider costs in making any important decision. A court should not conclude that Congress has forbidden an agency from adhering to that logical and ubiquitous practice unless Congress has clearly and explicitly barred an agency from complying with that first principle of rational decisionmaking. Moreover, it is often impossible for a regulatory agency to make a rational decision without considering costs in some way. Justice Breyer summarized the case in support of the pro-cost canon in his concurring opinion in *ATA*⁶⁰:

In order to better achieve regulatory goals -- for example to allocate resources so that they save more lives or produce a cleaner environment -- regulators must often take account of a proposed regulation's adverse effects. Thus, I believe that, other things equal, we should read silences or ambiguities in the language of regulatory statutes as permitting, not forbidding, this type of rational regulation.

Justice Breyer concurred in the Court's holding that CAA section 109 bars consideration of costs only because he found compelling evidence in the legislative history of CAA that Congress specifically, repeatedly, and unequivocally decided to bar consideration of costs in making

State, 103 Harv.

⁵⁹ I Pierce, *supra*. note 41, at §7.9. For discussion of the history of Executive Orders that require agencies to perform cost-benefit-analyses, see Richard H. Pildes & Cass R. Sunstein, *Reinventing the Regulatory State*, 62 U. Chi. L. Rev. 1, 6-7 (1995).

⁶⁰ 121 S. Ct. at 921.

decisions pursuant to that section.⁶¹

B. The Be Reasonable Canon

The second canon that courts have used to support holdings that ambiguous or silent statutes should be interpreted to allow consideration of costs is much broader in its potential scope -- an agency-administered statute should not be interpreted to bar an agency from considering any factor that is logically relevant to a decision unless Congress has clearly and explicitly barred the agency from considering that decisional factor.⁶² That principle might be best understood as a component of the arbitrary and capricious test, rather than as a canon of statutory construction. Any agency action must survive judicial application of the arbitrary and capricious test to be upheld on review.⁶³ The Supreme Court explained its method of applying the arbitrary and capricious test in its landmark opinion in *Motor Vehicle Manufacturers Assn. v. State Farm Mutual Automobile Assn*⁶⁴:

Normally, an agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

The Court's description of the test is ambiguous in an important respect. The Court says

⁶¹ *Id.* at 921-922.

⁶² *George E. Warren Corp. v. EPA*, 159 F.3d 616, 623-624.

⁶³ 5 U.S.C. §706.

⁶⁴ 463 U.S. 29, 43 (1983).

that an agency action is arbitrary and capricious if the agency "relied on factors which Congress has not intended it to consider." In this passage, the Court could have intended to bar an agency from considering any factor Congress did not explicitly identify as a decisional factor in the relevant statute, or the Court could have intended only to bar an agency from considering a factor that Congress itself barred the agency from considering. The latter reading of the phrase is far more realistic and sensible. Like the rest of us, members of Congress are always seeking to further many societal goals -- far more than Congress lists in any statute. Jerry Mashaw and David Harfst have made the point well⁶⁵:

This agency, any agency, should always read between the lines of its statute an implicit qualification of the form: "Don't forget that this statute does not exhaust our vision of the good life or the good society. Remember that we have other goals and other purposes that will sometimes conflict with the goals and purposes of this statute. If we forgot to mention all those potential conflicting purposes in your instructions, take note of them anyway. For heaven's sake, be reasonable."

The principle that Mashaw and Harfst explain so well can be stated in the form of a canon of construction: a court should not conclude that Congress intended to bar an agency from considering a factor that is logically relevant to a decision unless Congress has clearly manifested its intent to bar consideration of that factor. For convenience, I will refer to that principle as the be reasonable canon. Courts have often applied such a canon.⁶⁶ The D.C. Circuit's 1998 opinion

⁶⁵ Jerry L. Mashaw & David L. Harfst, *The Struggle for Auto Safety* 215 (1990).

⁶⁶ E.g., *Allied Local & Regional Manufacturers Caucus v. EPA*, 215 F.3d 61, 78; *Grand Canyon Air Tour Coalition v. FAA*, 154 F.3d 455, 475; *International Bhd. of Teamsters v. U.S.*, 735 F.2d 1525, 1529 (D.C. Cir. 1984).

in *George E. Warren Corp. v. EPA*⁶⁷ provides a good illustration.

The CAA Amendments of 1990 included provisions that required EPA to establish a reformulated gasoline program that would improve air quality by reducing the pollutants emitted as a result of combustion of gasoline in automobiles.⁶⁸ EPA issued rules that required refiners to provide a new mix of gasoline products to the U.S. market.⁶⁹ The rules provided for different treatment of foreign and domestic refiners.⁷⁰ Foreign refiners brought a proceeding at the World Trade Organization (WTO) in which they alleged that the rules discriminated against foreign refiners in violation of U.S. treaty obligations. WTO agreed with the foreign refiners.⁷¹ EPA then amended the rules in ways that brought them in compliance with applicable treaty provisions.⁷² EPA also considered costs and practicability in crafting the amended rules. Domestic refiners and environmental organizations challenged the validity of the amended rules on the basis that EPA had unlawfully considered other factors, including the WTO decision, costs, and practicability, when the statute instructed it to consider only air quality when it issued rules to implement the reformulated gasoline provisions of CAA.

The court upheld the amended rules. It acknowledged that the statute identified air quality as the sole goal of the reformulated gasoline program. Indeed, the court had previously held that

⁶⁷ 159 F.3d 616.

⁶⁸ 42 U.S.C. §7545.

⁶⁹ 59 Fed. Reg. 7716 (1994).

⁷⁰ 159 F.3d at 619.

⁷¹ *Id.* at 619.

⁷² *Id.* at 619-620.

the "sole purpose of the [reformulated gasoline] program is to reduce air pollution."⁷³ The court referred, however, to its "usual reluctance to infer from congressional silence an intention to preclude the agency from considering factors other than those listed in a statute"⁷⁴ It said that its "usual reluctance . . . is bolstered in this case by the decisions of the WTO lurking in the background."⁷⁵ It cited, and quoted from, several Supreme Court opinions that admonish courts to interpret statutes in a manner consistent with international law.⁷⁶ Many other cases apply the canon that congressional silence should not be interpreted to bar an agency from considering a wide variety of factors, including cost, that are logically relevant to a decision.⁷⁷

To review the situation before *ATA*, courts had applied one or both of two canons as bases for a long line of decisions in which they held that a regulatory agency can consider costs in its decisionmaking unless Congress clearly prohibited the agency from considering costs. As a result, Courts had interpreted all of the many provisions of regulatory statutes that are ambiguous or silent with respect to costs to permit the agency to consider costs, and courts had interpreted only two statutory provisions to bar consideration of costs -- in both cases because of powerful evidence that Congress intended to bar the agency from considering costs in making the particular decisions at issue.

To what extent do those two canons and that large body of case law survive *ATA*? The

⁷³ *American Petroleum Institute v. EPA*, 52 F.3d 1113, 1119 (D.C. Cir. 1995).

⁷⁴ 159 F.3d at 624.

⁷⁵ *Id.* at 624.

⁷⁶ *Id.* at 624-625.

⁷⁷ See, e.g., cases cited in note 66 *supra*.

holding in *ATA* is easy to reconcile with the pre-existing law in the area, but the *reasoning* in *ATA* raises serious questions about the continuing vitality of the pre-existing law. The Court could have supported the holding with the reasoning in Justice Breyer's concurring opinion.⁷⁸ a court should assume that Congress intended to allow an agency to consider costs unless it finds compelling evidence to the contrary, but the legislative history of CAA section 109 provides such evidence. The Court also could have relied on the reasoning at the beginning of Justice Scalia's opinion.⁷⁹ the plain meaning of the language of CAA section 109 precludes EPA from considering costs. An opinion based on either of those methods of reasoning would have left the pre-existing canons and case law intact.

C. The Anti-Cost Canon

The Court did not support its holding with either of those lines of reasoning, however. Instead, Justice Scalia's opinion for the Court seemed to announce and to apply a new canon that is inherently inconsistent with all of the pre-existing law applicable to interpretation of agency-administered regulatory statutes. After recognizing that the language of section 109 could bear an interpretation that allowed EPA to consider costs in some way, Justice Scalia rejected any such interpretation because respondents failed to show a "clear" "textual commitment of authority to EPA to consider costs"⁸⁰ That reasoning reflects the application of a common form of a canon of construction -- a clear statement rule, i.e., we will not interpret a statute to allow an agency to consider costs in any way unless Congress has clearly indicated that the agency is

⁷⁸ 121 S. Ct. at 921.

⁷⁹ *Id.* at 908.

⁸⁰ *Id.* at 909-911.

allowed to consider costs. I will refer to that as the anti-cost canon.

D. Choosing Among the Competing Canons

Prior to *ATA*, courts applied two clear statement rules that had the effect of allowing any agency to consider costs unless Congress clearly prohibited it from doing so. Both of those canons of construction are inconsistent with the new clear statement rule the Court announced and applied in *ATA*. Does *ATA* disapprove of the pre-existing canons and overrule the long line of cases that were decided through application of those canons? That question is important because there are scores of provisions of regulatory statutes that are silent or ambiguous with respect to agency consideration of costs. The Court provided only a few indeterminate clues that we can use to try to answer that question.

The Court told us little about the strength, scope, or source of the new anti-cost canon. The Court made several vague or metaphorical references to its apparent belief that Congress is explicit when it intends to allow an agency to consider costs, e.g., "Congress . . . does not hide elephants in mouseholes."⁸¹ It provided no evidence or reasoning in support of either that questionable belief or the resulting canon except for the noncontroversial but unhelpful observation that Congress sometimes explicitly authorizes an agency to consider costs.⁸²

The Court also did not say anything that is helpful in resolving the obvious conflict between the two pre-existing canons and the new anti-cost canon. The text of the Court's opinion made no reference at all to the pre-existing canons or to the many circuit opinions that have applied those canons as the basis for holdings that allow agencies to consider costs. The Court

⁸¹ *Id.* at 910.

⁸² *Id.* at 909.

indirectly and implicitly acknowledged the conflict between its holding and reasoning and some of the pre-existing law in a footnote, however.⁸³ The Court cited three of the cases in which the D.C. Circuit applied the pro-cost canon to support holdings that allowed EPA to consider costs in making other classes of decisions and distinguished those cases on the basis that none of the statutory provisions at issue "shares section 109(b)(1)'s prominence in the overall statutory scheme." It is hard to know what that means.

The Court's terse treatment of the pro-cost canon suggests that it approves of the traditional application of the pro-cost canon to most statutory provisions, but that a court must apply the new anti-cost canon to any provision of great prominence in a statutory scheme. A legal regime with such a dichotomous set of canons makes so little sense, however, that it is hard to believe that the Court really intended to instruct lower courts to apply opposite canons of construction to linguistically equivalent statutory provisions depending upon each provision's relative "prominence" in a statutory scheme. Thus, we are left with no useful guidance with respect to the circumstances in which the pro-cost canon applies versus the circumstances in which the anti-cost canon applies. We know even less about the Court's attitude toward the be reasonable canon or the relationship between that canon and the obviously inconsistent new anti-cost canon. The *ATA* Court made no reference either to the be reasonable canon or to any of the cases in which courts have applied that canon.

Given the confusing and indeterminate manner in which the Court discussed the traditional pro-cost canon, the new anti-cost canon, the be reasonable canon, and the relationship among those canons, it may make the most sense to ignore the Court's terse and confusing references to

⁸³ *Id.* at 910 n.1.

canons and to focus instead on the case for and against judicial application of each of the three canons. That is the approach the Court is most likely to take in future cases. The Court is reluctant to overrule its own precedents, but it has shown considerable willingness to ignore portions of the reasoning in its precedents.⁸⁴

The anti-cost canon the *ATA* Court applied is new. I have not found any reference to it in any prior judicial opinion or in any scholarly writing. It seems to be based entirely on the Court's apparent belief that Congress intends to bar consideration of costs in regulatory decisionmaking unless it clearly authorizes an agency to consider costs, at least if the statutory provision at issue is particularly "prominent." Justice Scalia provided no data or reasoning in support of that apparent belief, and I am unaware of anyone else who has attempted to support it. Thus, the case in support of the anti-cost canon must be considered weak, particularly in light of the much stronger case in support of the pro-cost canon.

The D.C. Circuit announced the pro-cost canon in a unanimous en banc opinion in 1987.⁸⁵ It has applied that canon consistently and with no dissenting opinions in a long line of cases that arose in a wide variety of contexts.⁸⁶ EPA has frequently and successfully urged the D.C. Circuit to apply that pro-cost canon.⁸⁷ The pro-cost canon has been explained and supported by scores of

⁸⁴ Thus, for instance, the Court has overruled only two of its one hundred plus decisions in antitrust law, but it has abandoned completely many of its prior methods of reasoning in antitrust cases. See generally Thomas D. Morgan, *Modern Antitrust Law and its Origins* (2d ed. 2001).

⁸⁵ *Natural Resources Defense Council v. EPA*, 824 F. 2d 1146, 1154-1166.

⁸⁶ See cases cited in note 57 *supra*.

⁸⁷ E.g., *Michigan v. EPA*, 213 F.3d 663, 678-679; *George E. Warren Corp. v. EPA*, 159 F.3d 616, 623-624.

distinguished scholars in numerous books and articles.⁸⁸ It has also been implicitly supported by each of the past seven Presidents of both political parties,⁸⁹ and it was explicitly supported by Justice Breyer in his concurring opinion in *ATA*.⁹⁰ Benjamin Franklin described the common sense basis for the pro-cost canon over two centuries ago. Writing to a friend who was perplexed by a difficult decision, he explained his own approach:⁹¹

When those difficult cases occur, they are difficult, chiefly because while we have them under consideration, all the reasons pro and con are not present to the mind at the same time. . . . To get over this, my way is to divide half a sheet of paper by a line into two columns; writing over the one Pro, and over the other Con. Then, during three or four days consideration, I put down under the different heads short hints of the different motives, that at different times occur to me, for or against the measure. When I have thus got them all together in one view, I endeavor to estimate their respective weights. . . . And, though the weight of reasons cannot be taken with the precision of algebraic quantities, yet when each is thus considered, separately and comparatively, and the whole lies before me, I think I can judge better, and am less liable to make a rash step, and in fact I have found great advantage from this kind of equation, in what may be called moral or prudential algebra.

⁸⁸ See sources cited in note 58 *supra*.

⁸⁹ See sources cited in note 59 *supra*.

⁹⁰ 121 S. Ct. at 921.

⁹¹ Quoted in *International Union v. OSHA*, 938 F. 2d 1310, 1321 (D.C. Cir. 1991).

The case in support of the pro-cost canon is strong, but a pair of scholars have developed a series of powerful arguments against judicial acceptance of that canon. David Driessen argues that the judiciary would be usurping the power of Congress to make major social policy decisions if it were to adopt the pro-cost canon.⁹² He analogizes such an action to the widely criticized decisions of the *Lochner*-era Court to use a politically controversial economic philosophy as the basis to resolve many disputes.⁹³ He notes that many citizens oppose use of costs in making environmental, health, and safety regulatory decisions, in part because use of costs in those contexts requires a decisionmaker to place a monetary value on human life.⁹⁴ Lisa Heinzerling illustrates the politically controversial nature of the pro-cost canon by noting that Congress recently engaged in a heated debate on a Bill that would have required agencies to consider costs in making all regulatory decisions.⁹⁵ That Bill was defeated by a narrow margin.

I find the pro-cost canon appealing. As I will explain in the next part of this article, I do not believe it is possible to make many regulatory decisions in a rational manner without considering costs in some way.⁹⁶ Regrettably, however, Driessen and Heinzerling have persuaded me that courts should not adopt, or retain, a pro-cost canon. Courts are already struggling to

⁹² David M Driessen, *The Societal Cost of Environmental Regulation: Beyond Administrative Cost-Benefit Analysis*, 24 *Ecology L. Q.* 545, 605-613 (1997).

⁹³ *Id.* at 605-613.

⁹⁴ See Guido Calabresi & Philip Bobbitt, *Tragic Choices* 187-189 (1978).

⁹⁵ Brief for Respondents Massachusetts and New Jersey (authored by Lisa Heinzerling) in *American Trucking Associations v. Browner*, Supreme Court No. 99-1426, pp. 39-41 (Sep. 11, 2000).

⁹⁶ See text at notes 103-139 *infra*.

avoid the public perception that judges are simply life-tenured politicians in robes.⁹⁷ Judicial adoption of the politically contentious pro-cost canon could contribute to that unfortunate public perception.

That leaves only the question whether the courts should adopt the be reasonable canon, i.e., a court should not interpret congressional silence to bar agency consideration of any factor that is logically relevant to a decision. Jerry Mashaw and David Harfst have done a particularly good job of explaining and supporting that canon.⁹⁸ Every citizen/voter has a complicated, multi-faceted picture of the good life. That picture includes prosperity, peace, health, a clean environment, and scores of other characteristics of a society that cause each of us to consider it good. Congress necessarily reflects that same complicated mix of myriad values and goals. It is safe to assume that Congress wants agencies to consider all of those values and goals. Yet, it would be totally unrealistic to expect Congress to list in any single statute all of those often conflicting values and goals as factors an agency can consider in making any important decision. It follows that a court would be foolish to interpret a statute in which Congress has listed two, three, or four decisional factors as reflective of a congressional decision to ban agency consideration of the many other values and goals that are relevant to a decisionmaking process and that are shared by virtually all citizens and members of Congress. Thus, a court should interpret a statute to bar an agency from considering a factor that is logically relevant to a decision only if Congress has clearly manifested its intent to prohibit agency consideration of that

⁹⁷ See Richard J. Pierce, Jr., *The D.C. Circuit's Contribution to Administrative Law*, ____ *Geo. L. J.* ____ (2002).

⁹⁸ Mashaw & Harfst, *supra*. note 65, at 215.

factor.

The case in support of the be reasonable canon is extremely powerful. That canon also is not vulnerable to the criticism that it enmeshes the judiciary too deeply into the political process. The be reasonable canon is politically neutral. It can be used, and should be used, to allow agencies to consider the potential effects of their decisions on the economy,⁹⁹ on U.S. treaty obligations,¹⁰⁰ on international relations,¹⁰¹ on public health and the environment,¹⁰² and on myriad other social goals and values that are universally embraced by citizens and our elected representatives.

The courts should adopt the be reasonable canon, and they should reject both the pro-cost canon and the anti-cost canon. Of course, the be reasonable canon, like all other canons of construction, provides only a framework for making a class of decisions. A court could easily apply the be reasonable canon and still conclude that Congress clearly prohibited EPA from considering costs in setting air quality standards pursuant to CAA section 109, as Justice Breyer reasoned in his concurring opinion in *ATA*¹⁰³. Thus, whether the prohibition on costs announced

⁹⁹ E.g., *Grand Canyon Air Tour Coalition v. FAA*, 154 F.3d 455, 475.

¹⁰⁰ E.g., *Vinar Seguros y Reaseguras, S.A. v. M/V Sky Reefer*, 515 U.S. 528, 539 (1995).

¹⁰¹ E.g., *The Schooner Charming Betsy*, 6 U.S. (2 Cranch) 64, 118 (1804).

¹⁰² As a matter of logic, the be reasonable canon authorizes an agency to consider the effects of its decisions on public health and on the environment unless Congress has clearly prohibited the agency from considering those universally-embraced social values. In a bizarre opinion that is obviously inconsistent with the be reasonable canon, however, the D.C. Circuit held that EPA could not consider the environmental or public health effects of a class of decisions because Congress did not explicitly authorize it to consider those factors. *Ethyl Corp. v. EPA*, 51 F.3d 1053, 1059-1062 (D.C. Cir. 1995).

¹⁰³ 121 S. Ct. at 921-924.

in *ATA* applies to many types of decisions or to only a few, courts will be called upon to review some important agency actions that fall within the scope of that holding.

III. JUDICIAL REVIEW AFTER *ATA*

In part II, I discussed the scope of the holding in *ATA* -- how many types of regulatory decisions are governed by the prohibition on agency consideration of costs. I concluded that the scope of that holding depends on which of three inherently inconsistent canons of construction the courts adopt. I urged adoption of one and rejection of the other two, but I recognized that there is not nearly enough clarity in the case law to determine which, if any, of the three canons is the law today or to predict which will be the law in the future. Thus, the prohibition on agency consideration of costs may apply only to EPA decisions pursuant to CAA section 109 and to one or two other classes of regulatory decisions, or it may apply to scores of classes of regulatory decisions.

In this part, I explore a question that is important independent of the scope of the holding in *ATA*. How can, or should, courts review decisions of the type that gave rise to the dispute that the Court addressed in *ATA* and that fall within the scope of the holding in that case? Specifically, how can, or should, a court apply the arbitrary and capricious test to decisions to set maximum permissible concentrations of substances that have no zero-harm threshold and a linear dose-response curve without considering costs in any way?¹⁰⁴ Neither the D.C. Circuit nor the Supreme Court addressed that question in *ATA*,¹⁰⁵ but both provided some clues that may be useful in exploring the question.

¹⁰⁴ The arbitrary and capricious test applies to all agency actions. 5 U.S.C. §706.

¹⁰⁵ See text at notes 41-45 *supra*.

A. The D.C. Circuit Rejected EPA's Explanation of Its Actions

The D.C. Circuit provided particularly good clues with respect to its likely resolution of the arbitrary and capricious issue. The D.C. Circuit was unable to determine how EPA decided "how much [pollution] is too much" when it set the new PM and ozone standards.¹⁰⁶ The D.C. Circuit used its inability to understand the basis for EPA's decision to support its holding that EPA's interpretation of CAA section 109 is unconstitutional.¹⁰⁷ That method of reasoning was unprecedented and would have drawn into question the validity of scores of other regulatory statutes.¹⁰⁸ The Supreme Court's unanimous rejection of the D.C. Circuit's holding was understandable and predictable.¹⁰⁹ The Court has repeatedly approved of an alternative method of reasoning, however, that is entirely consistent with the D.C. Circuit's rejection of EPA's action based on the court's inability to understand why EPA made the decisions at issue. If an agency has provided an explanation for an action that a court does not understand or that is inconsistent with the available data, the court has a duty to reverse the agency action as arbitrary and capricious.¹¹⁰ That is what the D.C. Circuit should have done in *ATA*.

The court explained why it could not understand the basis on which EPA chose the PM and ozone standards it announced in the two rules at issue. In each case, EPA characterized the likely relationship between concentrations of the two substances and the adverse health effects of

¹⁰⁶ 175 F.3d at 1034.

¹⁰⁷ *Id.* at 1037.

¹⁰⁸ *Pierce*, *supra*. note 42, at 66-78.

¹⁰⁹ 121 S. Ct. at 911-914.

¹¹⁰ See cases discussed in *I Pierce*, *supra*. note 41, at §7.4.

the two as continuous and linear.¹¹¹ EPA's quantitative estimates of the relationships between concentrations and health effects were consistent with those characterizations. EPA estimated that each increment of reduction in the concentration of, or exposure to, PM would yield approximately 10,000 fewer premature deaths per year,¹¹² while each increment of reduction in the concentration of, or exposure to, ozone would yield approximately 20,000 fewer incidents of respiratory distress suffered by asthmatics each year.¹¹³

EPA said that it chose the new PM standard because "there is generally the greatest statistical confidence in observed associations for levels at or above" that level.¹¹⁴ The court rejected that explanation and many similar explanations because EPA could use them as easily to explain any other conceivable choice of standards, i.e., at any level EPA chooses, the statistical confidence in a correlation with adverse health effects will be greater for concentrations at or above that level.¹¹⁵ It is hard to imagine any explanation for EPA's choice of any particular standard that can provide a rational basis for choosing one standard over any lower alternative if the substance at issue is characterized by the absence of a zero-effect threshold and a linear dose-response curve, and if EPA is not allowed to consider costs in any way. Thus, for instance, EPA can always say that it chose an ozone standard of 0.08, rather than 0.09, because that decision will eliminate about 20,000 incidents of respiratory distress per year, but it cannot explain why it

¹¹¹ 175 F.3d at 1033.

¹¹² See sources cited in note 46 supra.

¹¹³ See sources cited in note 47 supra.

¹¹⁴ 62 Fed. Reg. 38676 n. 42.

¹¹⁵ 175 F.3d at 1035-1037.

chose 0.08, rather 0.07, when the choice of 0.07 would yield about the same increment in public health improvement.¹¹⁶

Of course, EPA could explain its choice of both the PM and the ozone standards easily if it could refer to costs. EPA chose standards that are entirely consistent with its analysis of the costs and benefits of alternative standards.¹¹⁷ Thus, for instance, it could defend its choice of 0.08 rather than 0.07, on the common sense basis that the costs of attaining a 0.07 standard exceed the benefits of that standard. More broadly, EPA could defend its decisions to adopt standards that continue to yield severe adverse health effects on the basis that the only standards that would prevent *all* serious adverse health effects would have catastrophic effects on the performance of the economy.¹¹⁸ EPA is legally prohibited from explaining its decisions in that manner, however, because it is prohibited from considering costs. As a result, all of its standard-setting decisions are highly vulnerable to the D.C. Circuit's complaint that it cannot understand the basis for the decision.

Justice Scalia's opinion for the Court said nothing that is at all helpful to an attempt to understand the Supreme Court's posture on the arbitrary and capricious issue. Some Justices began to press counsel for EPA to explain the basis for EPA's decisions at oral argument, but they abandoned pursuit of that question when counsel reminded them that the arbitrary and capricious issue was not properly before the Court.¹¹⁹ Justice Breyer alone hinted at a possible resolution of

¹¹⁶ See sources cited in note 47 *supra*.

¹¹⁷ See RIA at ES-12 to -22.

¹¹⁸ *Pierce*, *supra* note 42, at 69-78.

¹¹⁹ See notes 44-45 *supra*.

the issue in his concurring opinion.¹²⁰

B. Justice Breyer's Attempt to Explain EPA's Actions

Justice Breyer expressed the view that EPA would be able to explain its decisions to set standards for no-threshold pollutants at levels above the economically catastrophic levels that would eliminate both all adverse public health effects and all economically beneficial activity in the U.S.¹²¹ He asserted that EPA has discretion to consider "context," including "the public's ordinary tolerance of the particular health risk in the particular context at issue,"¹²² in deciding how much pollution is too much. It is impossible to know whether other Justices share Justice Breyer's views. Even if a majority of the Court were to adopt his views, however, they would not provide an adequate basis for EPA to explain its decisions in this class of cases.

I am puzzled by some of Justice Breyer's reasoning. In places he seemed to paraphrase an argument that the government made in its briefs: barring EPA from considering costs still leaves it free to engage in "systematic weighing of pros and cons" when it sets standards.¹²³ That statement is simply false. If an agency cannot consider costs, it cannot consider cons. "Cons" and "costs" are synonyms. If an agency is barred from considering cons, and it can consider only the pros of issuing a more stringent standard, it has no choice but to make a decision that eliminates all adverse public health effects of a pollutant and all industrial activity in the nation. The

¹²⁰ 121 S. Ct. at 921.

¹²¹ *Id.* at 923-924.

¹²² *Id.* at 924.

¹²³ E.g., Brief for the Federal Respondents in *American Trucking Associations v. Browner*, Supreme Court No. 99-1426, p. 34 n. 25.

government conceded that point in another part of its internally inconsistent brief: "Nothing in . . . section 109 . . . allows EPA to set NAAQS at levels inadequate to protect the public from adverse medical effects" ¹²⁴

Justice Breyer stated that EPA can consider "context" in deciding what is "requisite" to protect the "public health." ¹²⁵ The "context" that is most important to this class of decisions, however, is the legally-mandated assumption that it is costless to eliminate all adverse health effects of a pollutant. In that "context," any rational person would decide to take the steps necessary to eliminate *all* adverse health effects. Justice Breyer attempted to illustrate his point by noting that we consider football helmets "safe" in context, even though helmeted football players continue to suffer occasional head injuries. ¹²⁶ That analogy does not work. I am sure that Justice Breyer would join me and all other right-thinking people in decrying a hypothetical decision by the NCAA to reject a new helmet design that would eliminate all head injuries *at no cost*. We would not consider the presently available helmets "safe" if we believed that there was a costless safer alternative. It is simply irrational to refuse to take an action that yields benefits without any costs.

Justice Breyer also expressed the view that EPA has discretion "to avoid regulating risks that it reasonably concludes are trivial in context." ¹²⁷ Even if a majority of Justices were to agree

¹²⁴ Id. at 36.

¹²⁵ 121 S. Ct. at 924.

¹²⁶ Id. at 924.

¹²⁷ Id. at 924.

with that controversial view,¹²⁸ a trivial harm exception to the duty to protect the public health would be of no help to EPA in the context of the PM or ozone standards. Based on EPA's estimates, even compliance with the new PM standard would yield about 10,000 premature deaths per year attributable to exposure to PM, while compliance with the new ozone standard would still yield scores of thousands of incidents of serious respiratory distress per year attributable to exposure to ozone.¹²⁹ No agency or court would characterize those adverse health effects as trivial.

C. Professor Heinzerling's Attempt to Explain EPA's Actions

Before giving up the search for a method of explaining EPA's line-drawing process, one other possibility warrants consideration. Lisa Heinzerling contends that the D.C. Circuit and most commentators have misunderstood what EPA means when it characterizes a substance as a nonthreshold pollutant. According to Heinzerling¹³⁰:

When EPA discussed the possibility that particulate matter and ozone are nonthreshold pollutants, the agency was referring to the fact that these pollutants have *not* been shown to *have* a threshold, that is, it has not been demonstrated that these pollutants cease to have adverse effects on human health or the environment below a certain level. EPA never claimed to have proven that PM and ozone have

¹²⁸ The other Justices expressed no view on this issue, but circuit courts have consistently rejected adoption of a trivial harm exception to putatively absolutist health and safety statutes. E.g., *Les v. Reilly*, 968 F. 2d 985 (9th Cir. 1992); *Public Citizen v. Young*, 831 F.2d 1108 (D.C. Cir. 1987).

¹²⁹ See sources cited in notes 46 and 47 *supra*.

¹³⁰ Lisa Heinzerling, *The Clean Air Act and the Constitution*, 20 *Saint Louis U. Pub. L. Rev.* 121, 125 (2001).

adverse effects on human health at every nonzero level. Thus, when EPA discussed the possibility that these are "no threshold" pollutants, it was referring to a *lack* of evidence that there *is* a threshold.

To Heinzerling, it follows that EPA had a rational basis for its new PM and ozone standards and that it can use the same basis to set standards applicable to all other pollutants -- EPA set the standards at the lowest levels at which it could prove the existence of adverse effects on public health.¹³¹ She attempts to bolster this description of EPA's method of decisionmaking by referring to the clause in CAA section 108 that requires EPA to describe and to act on "all identifiable effects on public health or welfare."¹³² According to Heinzerling, EPA set the ozone standard at 0.08, instead of 0.07, for instance, because it found "identifiable" adverse health effects at 0.08 but not at 0.07.¹³³

I have three problems with Heinzerling's attempt to find a basis for EPA's line-drawing decisions. First, I do not interpret EPA's statements of basis and purpose in the PM and ozone rulemakings in a manner consistent with her description of EPA's decisionmaking process.¹³⁴ EPA's statements are difficult to interpret. They are long and discursive, and they contain more than a few internal inconsistencies. They clearly include, however, many descriptions of adverse health effects of PM and ozone at concentrations below the levels EPA set for each pollutant.¹³⁵

¹³¹ Id. at 126-127.

¹³² 42 U.S.C. §7408(a)(2).

¹³³ Heinzerling, *supra*. note 130, at 126-127.

¹³⁴ 62 Fed. Reg. 38652; 62 Fed. Reg. 38856.

¹³⁵ E.g., 61 Fed. Reg. 65637, 65641-65643, 65651-65653; 61 Fed. Reg. 65716, 65725; 62 Fed. Reg. 38652, 38655-56, 38863-38865.

As I interpret EPA's discussion and analysis of the many studies it had before it, EPA clearly found the existence of significant adverse health effects of PM and ozone down to, and even below, the nonanthropogenic background levels. Yet, it chose standards above those levels.

Second, I am concerned that acceptance of Heinzerling's proposed method of determining how EPA draws lines will have the unintended adverse effect of hamstringing EPA. According to Heinzerling, EPA went as far as it legally could go in regulating PM and ozone. It set the maximum permissible concentrations at the lowest levels at which it could "prove" the existence of "identifiable" adverse effects.¹³⁶ I do not know how Heinzerling defines ambiguous terms like "proof" and "identifiable" for this purpose. Courts have long accepted as adequate to support regulatory action "proof" of harm that is equivalent to, or even less powerful than, the evidence EPA had before it to "prove" that PM and ozone have adverse effects on health at concentrations well below the levels EPA announced as the new maximum permissible levels in the two rulemakings. As early as 1974, the D.C. Circuit held that:¹³⁷

where . . . regulations turn on choices of policy, on an assessment of risks, or on predictions dealing with matters on the frontiers of scientific knowledge, we will demand adequate reasons and explanations, but not "findings" of the sort familiar

¹³⁶ Heinzerling, *supra*. note 130, at 126-127.

¹³⁷ *Amoco Oil Co. v. EPA*, 501 F. 2d 722, 740-741 (D.C. Cir. 1974). See also *Ethyl Corp. v. EPA*, 541 F.2d 1, 28 (D.C. Cir.) en banc, cert. denied, 426 U.S. 941 (1976):

The Administrator may apply his expertise to draw conclusions from suspected, but not completely substantiated, relationships between facts, from trends among facts, from theoretical projections from imperfect data, from probative preliminary data not yet certifiable as "fact," and the like. We believe that conclusions so drawn— a risk assessment – may, if rational, form the basis for health-related regulations under the "will endanger" language of Section 211.

from the world of adjudication.

I fear that the basis for line-drawing that Heinzerling ascribes to EPA and urges on courts could return us to the bad old days in which courts rendered regulatory agencies largely impotent by demanding that they satisfy burdens of proof that are not attainable.

Finally, I cannot reconcile Heinzerling's description of EPA decisionmaking with the language of CAA section 109. Heinzerling argues that EPA simply went as far as it could legally go in regulating PM and ozone by setting standards at the levels at which it could prove the existence of identifiable adverse health effects. Yet, section 109 requires EPA to set standards that "are requisite to protect the public health" with an "adequate margin of safety."¹³⁸ Surely, the phrase "adequate margin of safety" at least confers on EPA discretion to set maximum permissible concentrations at levels that are somewhat below the levels at which it can "prove" that a substance causes harm to the public health.

In short, I see nothing in EPA's reasoning in the PM or ozone rulemakings that would allow a court to determine why EPA drew the lines it drew in the two cases. I also see nothing in the reasoning that either Justice Breyer or Professor Heinzerling attempt to attribute to EPA, or to urge on EPA, that would allow a court to determine how EPA made its decisions in those cases. The Supreme Court has held unanimously that a reviewing court must reverse an agency action as arbitrary and capricious if the agency's reasoning is inadequate to allow the court to identify the basis for the agency action.¹³⁹ It follows that a reviewing court should hold that the

¹³⁸ 42 U.S.C. §7409(a).

¹³⁹ *Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Ass'n*, 463 U.S. 29 (1983).

EPA's actions in issuing the new PM and ozone standards were arbitrary and capricious. Moreover, the problems EPA encountered in its attempts to explain the bases for its new PM and ozone standards are endemic to any attempt by any agency to explain, without any reference to cost, why it chose any particular standard applicable to a no-threshold substance that is subject to a linear dose-response curve. It follows that courts should reverse all such agency actions as arbitrary and capricious.

I urge application of the demanding version of the arbitrary and capricious test the Court announced in *State Farm* with great reluctance.¹⁴⁰ Extensive empirical research has documented the existence of a powerful tendency for judges to act in accordance with their partisan political preferences when they apply that version of the arbitrary and capricious test to EPA actions.¹⁴¹ Thus, for instance, Ricky Revesz found that Republican judges concluded that EPA acted in an arbitrary and capricious manner in fifty-four to eighty-nine per cent of cases, while Democrat judges reached that conclusion in only two to thirteen per cent of cases.¹⁴² The judges who comprised the D.C. Circuit panel in *ATA* acted in a manner consistent with that startling finding. The two Republican members of the panel held the EPA action unlawful based on their conclusion that EPA had not adequately explained the bases for its actions,¹⁴³ while the Democrat member

¹⁴⁰ For extensive discussion and analysis of the *State Farm* test, see I Pierce, *supra*. note 41, at §7.4.

¹⁴¹ E.g., Richard L. Revesz, *Environmental Regulation, Ideology, and the D.C. Circuit*, 83 *Va. L. Rev.* 1717 (1997); Richard J. Pierce, Jr., *Two Problems in Administrative Law: Political Polarity on the D.C. Circuit and Judicial Deterrence of Rulemaking*, 1988 *Duke L.J.* 300 (1988).

¹⁴² Revesz, *supra*. note 141, at 1760-1764.

¹⁴³ 175 F.3d at 1034-1040.

found EPA's reasoning adequate to explain the bases for its action.¹⁴⁴

I am extremely uncomfortable urging the courts to make widespread use of a doctrine that is so malleable that it is highly susceptible to political manipulation.¹⁴⁵ Thus, I would like to identify an alternative to routine application of a strong version of the arbitrary and capricious test as the basis to reject a high proportion of agency actions of the type at issue in *ATA*. I will embark on a search for such an alternative in the next part of this article.

IV. WHAT SHOULD EPA DO AFTER *ATA*?

In part III, I predicted that EPA will experience great difficulty defending its decisions to establish standards in a manner consistent with the prohibition of its consideration of costs announced in *ATA*. Those decisions are highly vulnerable to judicial rejection as arbitrary and capricious. In this part, I explore potential ways in which EPA might be able to explain its decision in this class of cases to the satisfaction of courts.

A. The EPA Administrator Can Rely on The Opinions of People Who Have Considered Costs

One possible option for EPA is a variation of the status quo ante, i.e., EPA could simply continue to consider costs in its decisionmaking process while it continues to deny that it considers costs. That option requires some explanation. As I explained in part III, it is impossible to make a rational decision to decline to act in a manner that improves public health without considering the costs of the action in some way.¹⁴⁶ As a matter of simple logic and basic morality,

¹⁴⁴ 175 F.3d at 1057-1062.

¹⁴⁵ See *Pierce*, supra. note 97, at ____.

¹⁴⁶ See text at notes 103-139 supra.

EPA must take any costless action that improves public health. Yet, EPA has set air quality standards at levels that continue to yield severe adverse effects on public health. It has done so by considering costs *sub rosa*.

The *ATA* Court stated the prohibition on EPA consideration of costs broadly, but it seemed to authorize only an extremely narrow method of enforcing that prohibition. In footnote four, Justice Scalia said:¹⁴⁷

Respondents' speculation that the EPA is considering . . . costs . . . without telling anyone is irrelevant to our interpretive inquiry. If such an allegation could be proved, it would be grounds for vacating the NAAQS, because the Administrator had not followed the law.

Justice Scalia's choice of words in this footnote is interesting in several respects.

Justice Scalia referred to "speculation" that EPA is "considering" costs.¹⁴⁸ That is not a topic of "speculation." There is simply no doubt that EPA considered costs in the PM and ozone rulemakings. Consider means "to think about seriously."¹⁴⁹ As an institution, EPA clearly thought seriously about the costs of the PM and ozone standards. EPA prepared a 718-page analysis of the estimated costs of the two rules.¹⁵⁰ It revised its cost estimates significantly in response to comments from the many critics of its initial cost estimates, including congressional

¹⁴⁷ 121 S. Ct. at 911 n.4.

¹⁴⁸ *Id.* at 911 n.4.

¹⁴⁹ Webster's II New Riverside Dictionary Revised Edition (Office Edition) 151 (1996).

¹⁵⁰ RIA.

committees, the Department of Energy, and the President's Council of Economic Advisors.¹⁵¹

Moreover, numerous people who played significant roles in the EPA decisionmaking process have confirmed my belief that they personally considered costs and that they frequently discussed costs with other participants in that decisionmaking process. The people who have told me they considered and discussed costs include senior EPA staff members and members of EPA's Clean Air Scientific Advisory Committee (advisory committee). Moreover, it is obvious that the White House Office of Management and Budget (OMB) personnel who received, reviewed, and critiqued the EPA cost estimates considered costs in their discussions with the President and with the EPA personnel responsible for the rulemakings.

Justice Scalia's reference to "speculation" that EPA considered costs when it is abundantly clear that EPA considered costs suggests that he must be using some of the other words in footnote four in idiosyncratic ways. There are at least three ways in which Justice Scalia may have been replicating the behavior of the Cheshire Cat when he chose the words he used in footnote four. First, he may have intended to prohibit only "the Administrator" from considering costs. That would leave EPA staff, advisory committee members, and White House personnel who play major roles in the EPA decisionmaking process free to consider costs.

Second, Justice Scalia may have been using an idiosyncratic and technical definition of "consider." When he said that EPA could not "consider" costs, he may have intended only to prohibit it from referring to costs as part of the basis for its decision. Courts have sometimes used "consider" in that unusual sense of the word. Thus, for instance, the D.C. Circuit held that EPA cannot rely on communications from the President as any part of the basis for its choice of an air

¹⁵¹ See text at notes 47-52 *supra*.

quality standard, even though it recognized that "undisclosed Presidential prodding may direct an outcome that is . . . different from the outcome that would have obtained in the absence of Presidential involvement."¹⁵² That court also recognized that the President inevitably and appropriately considers costs when he "directs" EPA to issue a particular air quality standard pursuant to CAA section 109:¹⁵³

The authority of the President to control and supervise executive policymaking is derived from the Constitution; the desirability of such control is demonstrable from the practical realities of administrative rulemaking. Regulations such as those involved here demand a careful weighing of cost, environmental, and energy considerations. They also have broad implications for national economic policy. Our form of government simply could not function effectively or rationally if key executive policymakers were isolated from each other and from the Chief Executive. Single mission agencies do not always have the answers to complex regulatory problems. An overworked administrator exposed on a 24-hour basis to a dedicated but zealous staff needs to know the arguments and ideas of policymakers in other agencies as well as in the White House.

Third, Justice Scalia may have been using "proof" to refer to a particular form of proof when he referred to the consequences of "proof" that EPA considered costs. Judicial review of an agency action begins with a presumption of honesty and regularity so strong that it is virtually

¹⁵² *Sierra Club v. Costle*, 657 F.2d 257, 402-408 (D.C. Cir. 1981). See also *Chevron v. NRDC*, 467 U.S. 837, 865-866 (1984) (it is entirely appropriate for [the President] to make such policy choices [as EPA makes when it issues rules].")

¹⁵³ 657 F.2d at 406.

unrebuttable.¹⁵⁴ The Supreme Court has prohibited anyone from interrogating an agency decisionmaker to determine the actual basis for her decision except in rare circumstances.¹⁵⁵ Thus, in the vast bulk of cases, a party can "prove" that an agency acted on the basis of its consideration of prohibited factors only if the agency itself stated that it acted on the basis of those factors.

As rephrased to reflect a definition of EPA that refers only to "the Administrator," a definition of "consider" that refers only to "relies upon," and a definition of "proof" that refers only to a confession, the holding of *ATA* might be restated as:

The Administrator of EPA is prohibited from claiming or admitting that the agency used costs as any part of the basis for any decision it makes pursuant to CAA section 109.

As so restated, the holding of *ATA* would be entirely consistent with the demonstrable reality that the EPA staff members, the EPA advisory committee members, and the OMB personnel who play the dominant roles in the decisionmaking process consider costs.¹⁵⁶

¹⁵⁴ *United States v. Chemical Foundation*, 272 U.S. 1, 14-15 (1926).

¹⁵⁵ *Florida Power & Light v. Lorion*, 470 U.S. 729, 244 (1985). For a thorough discussion of the applicable law, see *II Pierce*, supra. note 41, at §§8.6 and 11.6.

¹⁵⁶ There is little doubt that the Administrator herself actually considered costs when she issued the Ozone and PM rules. See *Pierce*, supra. note 42, at 85-86. EPA Administrators typically deny that they consider costs in issuing air quality standards while they are in office and then admit that they did consider costs once they have left office. See, e.g., Wagner, supra. note 2, at 1641-43 and n.101 (reporting that Administrator Costle later admitted that he considered costs when he revised the ozone standard in 1979); Mark K. Landy, *The Environmental Protection Agency: Asking the Wrong Questions from Nixon to Clinton* 67-73 (1994) (reporting that debates about air quality between EPA Administrator Costle and the President's Council of Economic Advisors were dominated by discussions of costs). See also statement of George T. Woolf, former chair of the EPA Advisory Committee, in *Hearings on EPA's Rulemakings on the*

With the holding of *ATA* restated in that narrow, technical manner, EPA would have a somewhat better chance of being able to defend its standard-setting process. Courts, including the Supreme Court, have often held that agencies are allowed to consider the views of the White House, the agency's staff, and the agency's advisory committee in making major decisions.¹⁵⁷ The member of the D.C. Circuit panel who found EPA's explanations of its PM and ozone rules adequate referred repeatedly to EPA's reliance on the advice and opinions of its expert staff and advisory committee to support his view that EPA had a rational basis for its actions.¹⁵⁸ Moreover, both the D.C. Circuit and the Supreme Court have held unanimously that EPA may, and should, defer to the President by relying "upon the incumbent administration's views of wise policy to inform its judgements."¹⁵⁹

That judicial recognition of the important roles of the President, the agency's staff, and its advisory committee in EPA decisionmaking suggests that, while EPA cannot rely on costs as a basis for its decisions, it can rely on the opinions of its staff, members of its advisory committee, and the White House, even though those opinions are based on consideration of costs. EPA relied heavily on the opinions and analysis of its staff and advisory committee to support its decisions in the PM and ozone rulemakings. It noted, for instance, that no member of its advisory

National Ambient Air Quality Standards for Particulate Matter and Ozone, Before the Subcomm. on Commercial and Admin. Law of the House Comm. on the Judiciary, 105th Cong. 89 (1997) (testifying that it is impossible to set a standard for a non threshold pollutant that meets the statutory standard without considering costs).

¹⁵⁷ See cases discussed in *I Pierce*, supra. note 41, at §8.6.

¹⁵⁸ 175 F.3d at 1059.

¹⁵⁹ *Chevron v. NRDC*, 467 U.S. 837, 865-866; *Sierra Club v. Costle*, 657 F.2d at 407-408.

committee recommended adoption of an ozone standard below 0.08.¹⁶⁰ Of course, EPA did not mention what I have been reliably told and what should be obvious to anyone who looks at the record -- the opinions of the members of EPA's advisory committee were influenced by their knowledge that a standard below 0.08 would be extraordinarily costly to implement.

There is a problem with this potential method of defending EPA's standard-setting decisions, however. No court has held that an agency can rely *exclusively* on the opinions of its staff, its advisory committee, and/or the White House to explain and to support its decisions.¹⁶¹ The agency must rely at least in part on its own evaluation of the evidence before it. Thus, partial reliance on staff, advisory committees, and the White House is insufficient to escape the need for EPA to answer the critical question: Why did EPA refuse to take a presumptively costless action that would protect public health more effectively than the action it took pursuant to a statutory provision that instructs it to protect public health without considering costs?

B. Can EPA Consider the Public Health Costs of a More Stringent Standard?

It is not at all clear whether the Court prohibited EPA from considering all costs, or just economic costs, when it chooses air quality standards. The decision to adopt a more stringent air quality standard can have both direct and indirect public health costs, as well as economic costs. If EPA has the discretion to balance the public health benefits and the public health costs of alternative standards, it may be able to defend its choice of standards as rational with reference to

¹⁶⁰ 175 F.3d at 1059.

¹⁶¹ Thus, for instance, the D.C. Circuit has held that EPA cannot rely on Presidential communications as the basis for a decision. *Sierra Club v. Costle*, 657 F.2d at 406-408. Moreover, a majority of the members of the *ATA* panel rejected as inadequate the dissenting judge's reference to the opinions of the members of the Advisory Committee because they did not explain the bases for their decisions. 575 F.3d at 1035-1036.

such a framework for decisionmaking.

EPA's new ozone standard illustrates the potential for a more stringent air quality standard to have direct adverse effects on public health. Several studies, including one conducted by the Department of Energy, have found that each incremental reduction in the ambient concentration of ozone increases the incidence of skin cancer by increasing the population's level of exposure to ultraviolet rays from the sun.¹⁶² One study has estimated that EPA's new ozone standard would yield an annual increase of 2,000 to 11,000 skin cancers and 25 to 50 deaths due to melanomas.¹⁶³ EPA refused to consider that public health cost of the new ozone standards.¹⁶⁴ The D.C. Circuit reversed EPA on that issue and directed it to consider the public health costs of the new ozone standard on remand.¹⁶⁵ EPA acquiesced in that holding and has committed to reconsider its decision whether to issue the new ozone standard in light of its consideration of the potential effects of the standard on the incidence of skin cancer.

It will be interesting to see how EPA's consideration of the skin cancer effects of ozone influences its decisionmaking with respect to the desirability of its ozone standard. EPA estimated that the new PM standard would save about 10,000 lives per year, but it did not predict that the

¹⁶² Randall Lutter & Christopher Wolz, UV-B Screening by Tropospheric Ozone; Implications for the National Ambient Air Quality Standard, 31 *Environ. Sci. & Tech.* 142 A (1997); Statement of Marvin Frazier, DOE Office of Health & Environmental Research, Before the EPA Advisory Committee (Mar. 21, 1995); John F. Frederick, Empirical Studies of Tropospheric Transmission in the Ultraviolet: Broadband Measurements, 32 *J. Applied Meteorology* 1883 (1993); Paul J. Crutzen, Ultraviolet on the Increase, 365 *Nature* 104 (1992); National Research Council, Rethinking the Ozone Problem in Urban and Regional Air Pollution 110 (1991).

¹⁶³ Statement of Marvin Frazier, *supra*. note 162.

¹⁶⁴ See 175 F.3d at 1051-1052.

¹⁶⁵ *Id.* at 1052-1053.

new ozone standard would save any lives. Thus, the ozone standard EPA adopts on remand must reflect its attempt to balance a reduction of tens of thousands of cases of respiratory distress per year against an increase of thousands of skin cancer cases per year plus fifty to one hundred melanoma deaths per year.

The new PM standard appears to have no direct adverse effects on public health, but it has the potential to cause large indirect adverse effects on public health. Many studies have found that regulatory rules that impose economic costs have adverse effects on public health.¹⁶⁶ The basic relationship at issue is well-known and has been documented in dozens of studies.¹⁶⁷ Wealthy people are healthier and live longer than poor people. Economists have used that well-known relationship between wealth and health as the basis for estimates of the quantitative relationship between the costs of compliance with a regulation and the adverse effects of the regulation on public health. Thus, for instance, a 2000 study conducted jointly by the American Enterprise Institute and the Brookings Institution found that "strong evidence supports a causal linkage between income and mortality."¹⁶⁸ That study also concluded that a conservative estimate of the relationship between wealth and health would yield a prediction of one life lost for every

¹⁶⁶ E.g., W. Kip Viscusi, *The Value of Life in Legal Contexts: Survey and Critique*, 2 *Am. L. & Econ. Rev.* 195, 200 (2000); Randall Lutter, John F. Morrall III & W. Kip Viscusi, *The Cost-Per-Life-Saved Cutoff for Safety Enhancing Regulations*, 37 *Economic Inquiry* 599-608 (Oct. 1999); Ralph L. Keeney, *Estimating Fatalities Induced by the Economic Costs of Regulations*, 14 *J. Risk & Uncertainty* 5 (1997); Randall Lutter & John F. Morrall, *Health-Health Analysis: Another Way to Evaluate Health and Safety Regulation*, 8 *J. Risk & Uncertainty* 43-66 (1994); Stephen J. Breyer, *Breaking the Vicious Circle: Toward Effective Risk Regulation* 23 (1993).

¹⁶⁷ Robert W. Hahn, Randall W. Lutter, W. Kip Viscusi, *Do Federal Regulation Reduce Mortality?* 6 (2000).

¹⁶⁸ *Id.* at 11.

fifteen million dollars in regulatory compliance costs.¹⁶⁹ Other studies have estimated that one life is lost for every 7.5 million dollars in compliance costs.¹⁷⁰ Studies of the effects of EPA's new PM standard have found that the new standard could cause as many as 27,000 deaths per year attributable to the combination of the estimated compliance costs of the standard and the health-wealth relationship.¹⁷¹

EPA refused to consider the indirect health effects of the PM and ozone standards. Unlike its treatment of direct health effects, the D.C. Circuit upheld EPA's refusal to consider the indirect adverse effects of more stringent standards on public health.¹⁷² The court distinguished between the direct and indirect adverse public health effects of standards based primarily on its interpretation of CAA section 108(a)(2).¹⁷³ That section describes the "criteria" EPA must consider in setting a standard for a pollutant as "all identifiable effects on public health . . . which may be expected from the presence of such pollutant in the ambient air, in varying quantities." The direct adverse public health effects of a reduced concentration of a pollutant are effects of its "presence . . . in the . . . air, in varying quantities," but the indirect adverse effects are not effects of its presence, so the D.C. Circuit held that EPA must consider direct adverse public health effects but need not consider the indirect adverse public health effects of a more stringent

¹⁶⁹ *Id.* at 7.

¹⁷⁰ *Monsanto Co. v. EPA*, 19 F.3d 1201, 1210 (7th Cir. 1994); *International Union v. OSHA*, 938 F.2d 1310, 1326 (D.C. Cir. 1991).

¹⁷¹ Ralph L. Keeney & Kenneth Green, *Estimating Fatalities Induced by Economic Impacts of EPA's Ozone and Particulate Standards* 13 (1997).

¹⁷² 175 F.3d at 1041. See also *NRDC v. EPA*, 902 F.2d 962, 972-973 (D.C. Cir. 1990).

¹⁷³ 42 U.S.C. §7408(a)(2).

standard.

The D.C. Circuit's interpretation of the CAA in this respect is plausible, but the opposite interpretation would be at least as defensible. As the Supreme Court emphasized in *ATA*, section 109 is the most prominent provision of CAA.¹⁷⁴ That section instructs EPA "to protect the public health."¹⁷⁵ It seems strange to interpret the clearly subservient definition of "criteria" in section 108 in a manner that allows, or even requires, EPA to take an action that costs more lives than it saves. How could EPA or a court defend such a decision as "requisite to protect the public health?" EPA and reviewing courts will confront that daunting task if the Supreme Court combines its holding that EPA cannot consider economic costs with the D.C. Circuit's holding that EPA cannot consider the indirect adverse effects of an air quality standard on public health.

The Supreme Court did not address either the question whether EPA must (or can) consider the direct adverse public health effects of a more stringent standard or the question whether EPA must (or can) consider the indirect adverse public health effects of a more stringent standard. The Court could provide EPA a means of explaining and defending its line-drawing process by holding that EPA must consider both the direct and indirect adverse public health effects of more stringent air quality standards. EPA then would be able to make rational decisions by considering the pros and cons of alternative standards, with both the pros and the cons expressed with reference to public health criteria. I would not expect this apparent new decisional framework to have any effect on EPA's actual decisionmaking process, however. No matter what Congress or the courts say, I am confident that EPA will continue to follow Benjamin Franklin's

¹⁷⁴ 121 S.Ct. at 910 n.1.

¹⁷⁵ 42 U.S.C. §7409 (b)(1).

advice and make its decisions by comparing costs and benefits.¹⁷⁶ It is of no real consequence whether EPA accomplishes that task by converting health benefits into their economic equivalents or by converting economic costs into their public health equivalents.

CONCLUSION

I was disappointed with the Supreme Court's opinion in *ATA*. I had hoped that the Court would use the case as a vehicle to enhance candor and transparency in regulatory decisionmaking. EPA considers costs when it sets air quality standards. It would have been nice if the Supreme Court had legitimated that rational decisionmaking process so that reviewing courts and the public could find out how EPA actually makes decisions. Instead, the Court forced EPA to continue to hide its actual bases for decisionmaking behind an elaborate facade of meaningless verbiage. At this point, I can only argue in support of a pair of actions that have the potential to reduce the damage that the *ATA* opinion will inflict on attempts to encourage candor and transparency in regulatory decisionmaking – minimize the scope of the holding through careful choice of applicable canons of construction and allow agencies to provide a somewhat more candid description of their decisionmaking processes by encouraging them to consider the potential public health costs of actions that are motivated by a desire to improve public health.

¹⁷⁶ See text at note 91 *supra*.