Reanalyzing Cost-Benefit Analysis: Toward a Framework of Function(s) and Form(s)

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REANALYZING COST-BENEFIT ANALYSIS: TOWARD A FRAMEWORK OF FUNCTION(S) AND FORM(S)

Robert B. Ahdieh*

The analysis herein arises from the collision course between the sweeping reforms mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and a single sentence of the U.S. Code, adopted nearly fifteen years earlier and largely forgotten ever since. Few were likely thinking of Section 106 of the National Securities Market Improvement Act when the Dodd-Frank Act was enacted on July 21, 2010. As applied by the D.C. Circuit less than a year later in Business Roundtable v. SEC, however, that provision's peculiar requirement of cost-benefit analysis could prove the new legislation's undoing.

To help navigate this potential impasse, the Article that follows suggests the need to more carefully analyze the function and form of the cost-benefit analysis mandate in Section 106 and develops a generally applicable framework for doing so. Discussions of cost-benefit analysis have traditionally approached it as a fairly singular phenomenon—with broad aspirations of "efficiency" as its purpose and with its application in environmental and risk regulation understood to capture its form. In reality, cost-benefit analysis is both more ad hoc—and more systematically varied—than this account suggests.

The framework proposed herein thus makes an important contribution to our understanding of the complexities and varieties of cost-benefit analysis generally. In the particular case of Section 106, meanwhile, it counsels a distinct function and particular characteristics of form that will better direct its application—both to the myriad regulations mandated by the Dodd-Frank Act and beyond. Properly understood, Section 106 is designed to encourage SEC attention to substantive considerations that might otherwise be neglected, given the Commission's traditional focus on investor protection. As to form, Section 106 constitutes a true mandate and one properly subject to judicial review. Contrary to the analysis in Business Roundtable, however, that mandate is procedural rather than substantive in nature. By comparison with formal cost-benefit analysis, it is less rigidly quantitative. It does, however, demand careful attention to the distributional impacts of relevant rulemaking. To such particularized ends and in such tailored form, ultimately,

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cost-benefit analysis has the potential to generate significant insight—both under Section 106 and for financial regulation as a whole.

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INTRODUCTION

Federal regulation of the financial markets has been contested from its earliest days. In succession, the Securities Act of 1933 and the Securities Exchange Act of 1934 faced strong resistance. As one newspaper reported at the time: "There is no greater murmuring in the land than that which rises against the Securities Act."  

Representatives of industry did not just murmur, however, but warned loudly that the legislation would dry up the capital markets and "seriously retard economic recovery." More graphically, they railed that the Act sought to "burn down the house to exterminate [the] vermin."  

More than seventy-five years later, the story remains largely the same. The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 was fiercely fought and passed without a single vote to spare. Ensuing efforts of the Securities and Exchange Commission (SEC), the Commodity Futures Trading Commission, and bank regulators to undertake the nearly 400 rulemakings mandated by the legislation have faced comparable resistance.

Even the 1933 and 1934 Acts themselves continue to be challenged.

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2 Bumgardner et al., supra note 1, at 4 (internal quotation marks omitted).
3 Id. (internal quotation marks omitted); see also JOEL SELIGMAN, THE TRANSFORMATION OF WALL STREET 77 (1982); cf. WILLIAM O. DOUGLAS & GEORGE E. BATES, THE FEDERAL SECURITIES ACT OF 1933, 43 YALE L.J. 171 (1933) (arguing that effects of the Securities Act would be limited).
5 See Kevin McCoy, Dodd-Frank Act: After 3 Years, a Long To-Do List, USA TODAY (June 3, 2013), http://www.usatoday.com/story/money/business/2013/06/03/dodd-frank-financial-reform-progress/2377603/ (describing the finance industry's opposition to many of Dodd-Frank's provisions).
The last decade—opening with the litany of accounting scandals at Enron, MCI WorldCom, and other corporate behemoths and closing with the devastation of the global financial crisis—has brought an increasing sense of urgency to the design of effective regimes of financial market regulation. Proving Newton's third law of motion, however, this pressure has triggered an equal and opposite reaction among the opponents of increased regulation. Such resistance has taken many forms.\(^7\) Of late, however, a new weapon has emerged in the battle to delay, defer, or prevent the adoption of new financial rules: the claim of asserted inadequacies in the cost-benefit analysis of relevant regulations.

Since the introduction of cost-benefit analysis in the New Deal era,\(^8\) federal courts from the Supreme Court down have shown little inclination to engage in a searching review of agencies' conduct of such analysis.\(^9\) This has been true even of executive agencies—let alone independent ones, such as the SEC.\(^10\) While the SEC has voluntarily engaged in cost-benefit analyses of its rulemaking for more than thirty years, its assessments were, until recently, all but never the subject of critical review.\(^11\) Even after Section 106 of the National...
Securities Market Improvement Act of 1996 (NSMIA) directed the SEC to "consider, in addition to the protection of investors, whether [an] action will promote efficiency, competition, and capital formation," courts showed little inclination to question the resulting analysis. Perhaps even more telling, litigants challenging SEC rulemaking did not think the question worth raising.

In the face of a decade's growth in the scope of financial market regulation, however, claims of error in the SEC's analysis of costs and benefits have become an important battlefront. Faced with the flood of SEC rulemaking demanded by Dodd-Frank, judicial review of the cost-benefit balance struck by the Commission as to each proposed rule may offer the best hope for opponents of increased regulation. Where they have lost the fight in Congress, at the White House, and before the SEC, cost-benefit analysis may now offer one more bite at the apple—this time, in the courts.

Consider, by way of example, the striking history of SEC rulemaking on shareholder proxy access: After a decade of debate, multiple congressional hearings, and several aborted rulemakings on this tool of shareholder participation and assertedly improved

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13 See Al-Alami, supra note 11, at 548–53 (reviewing D.C. Circuit decisions that voided SEC rules, but not on the basis of inadequate cost-benefit analysis).

14 Section 106 has been invoked in only three challenges to SEC rulemaking thus far. See Bruce Kraus & Connor Raso, Rational Boundaries for SEC Cost-Benefit Analysis 1 n.3 (unpublished manuscript) (on file with New York University Law Review) (noting relevant instances). That litigants have not seen the SEC's analysis of costs and benefits as good grounds for legal challenge is even more evident when we recall that in every one of those cases, the petitioners' Section 106 claim was successful. Id. at 2. Beyond cost-benefit analysis particularly, the SEC might be said to have been insulated from judicial review more generally, for much of its existence. See James D. Cox & Benjamin J.C. Baucorn, The Emperor Has No Clothes: Confronting the D.C. Circuit's Usurpation of SEC Rulemaking Authority, 90 TEx. L. Rev. 1811, 1814 (2012) (noting that "SEC-adopted rules enjoyed a blissful existence before the D.C. Circuit" before Chamber of Commerce v. SEC, 412 F.3d 133 (D.C. Cir. 2005)).

15 See David S. Hilzenrath, Wall Street Finds Relief in Court from SEC Rules, WASH. POST, Aug. 11, 2011, at A10 (noting that the court in Business Roundtable had set what could be an impossible standard to meet). That this is the dynamic at work is suggested by industry groups' willingness to invoke this newly discovered weapon in seeking to constrain SEC initiatives. See Cox & Baucorn, supra note 14, at 1846 (discussing the "rattling of appellate-review sabers by industry groups" after Business Roundtable). Jason Johnston's game-theoretic account of resistance to agency undertakings—first, by way of political lobbying, and then, through cost-benefit analysis and judicial review—suggests a conceptual framework for this dynamic. See Jason Scott Johnston, A Game Theoretic Analysis of Alternative Institutions for Regulatory Cost-Benefit Analysis, 150 U. PA. L. Rev. 1343 (2002).
corporate governance, the Dodd-Frank Act explicitly empowered the SEC to give shareholders access to the corporate proxy to nominate directors to the board. On June 18, 2009, the SEC proposed just such a rule, receiving over 600 comments and making various changes by way of response. More than a year later, it enacted (in a closely divided vote) Rule 14a-11, the first of hundreds of new rules addressed in Dodd-Frank and to be enacted in short order.

Considering SEC rulemaking unsafe at any speed, however, the Business Roundtable and the Chamber of Commerce challenged the new rule on behalf of their corporate memberships, invoking the cursory, and otherwise obscure and mostly ignored, language of Section 106 of the NSMIA, which directed the SEC to consider the impact of its rules on "efficiency, competition, and capital formation." Building on a pair of recent D.C. Circuit decisions—the first also arising out of a claim by the Chamber of Commerce—they argued that the SEC's assessment of the costs and benefits of mandatory proxy access had not met the requirements of Section 106. To the surprise of both administrative law and securities regulation experts,

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16 See Anthony W. Mongone, Business Roundtable: A New Level of Judicial Scrutiny and Its Implications in a Post-Dodd-Frank World, 2012 COLUM. BUS. L. REV. 746, 759-63 (2012) (reviewing history of SEC consideration of proxy access rule for shareholders). In just the final two years of the proxy access fight, drafting the rule reportedly cost the SEC 21,000 staff hours and $2.2 million. Id. at 794; Rachel A. Benedict, Judicial Review of SEC Rules: Managing the Costs of Cost-Benefit Analysis, 97 MINN. L. REV. 278, 278 (2012); see also Ben Protess, Court Ruling Offers Path to Challenge Dodd-Frank, N.Y. TIMES, Aug. 18, 2011, at B1.


20 See Elaine Buckberg, Jonathan Macey & James Overdahl, Will Court Short-Circuit Dodd-Frank?, POLITICO.COM, (Aug. 15, 2011, 4:23 AM), http://www.politico.com/news/stories/0811/61363.html (noting that the rule that the court struck down was "the first of approximately 250 new regulations required under Dodd-Frank"). The pace of agency action on the rulemakings dictated by Dodd-Frank has been halting at best. See McCoy, supra note 5 (noting that about two-thirds of Dodd-Frank's rulemaking deadlines had not been met just a month before the third anniversary of its passage).


the D.C. Circuit agreed in Business Roundtable v. SEC, vacating the rule and sending it back to the SEC, which promptly announced its intention to forgo any appeal and abandon further efforts to enact the rule.\(^{23}\)

On multiple levels, the Business Roundtable decision came as a surprise to scholars and practitioners of administrative law.\(^{24}\) Most simply, the D.C. Circuit’s analysis seemed all but impossible to reconcile with the high standard of deference the Supreme Court had established for judicial review of agency action.\(^{25}\) In rejecting the SEC’s reliance on certain academic sources over others in support of its rulemaking, the D.C. Circuit seemed to be engaged in just the type of substitution of its judgment for that of the agency that the Court had explicitly forbidden.\(^{26}\) That this lack of deference came in the realm of securities regulation—which had received especially broad deference from the courts in the past—added to the surprise.

Perhaps most surprising, however, was Business Roundtable’s dramatic departure from the deference the courts had previously shown agency evaluations of costs and benefits.\(^{27}\) The D.C. Circuit’s demands would have been out of the ordinary, thus, as to any cost-benefit analysis provision. That they arose out of the obscure language of Section 106—and its mere instruction to the SEC to “consider” the


\(^{24}\) See, e.g., Cox & Baucom, supra note 14 (suggesting inconsistency of Business Roundtable with Supreme Court precedent and Congressional standards); Hayden & Bodie, supra note 18 (addressing the “bizarre” nature of the court’s reasoning); Mongone, supra note 16 (discussing the unprecedented level of judicial scrutiny applied in Business Roundtable).

\(^{25}\) See Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983) (holding that the scope of review under the arbitrary and capricious standard is narrow, and a court is not to substitute its own judgment for that of the agency).

\(^{26}\) See id.

\(^{27}\) See Case Note, supra note 18, at 1094 (noting that Business Roundtable set an even higher standard of review than normally used in the D.C. Circuit); see also Hayden & Bodie, supra note 18, at 102 (suggesting that the court’s reasoning in Business Roundtable “contravenes the traditional deference to administrative authority”); Steven M. Davidoff, Proxy Access in Limbo After Court Rules Against It, N.Y. Times, July 27, 2011, http://dealbook.nytimes.com/2011/07/27/proxy-access-in-limbo-after-court-rules-against-it/ (arguing that the opinion creates “an almost insurmountable barrier” for agency action). Such deference has been especially high when it comes to agencies’ assessment of technical or scientific questions. See, e.g., Baltimore Gas & Elec. Co. v. NRDC, 462 U.S. 87, 103 (1983) (noting that “a reviewing court must generally be at its most deferential” when examining scientific determinations).
impact of proposed rules on "efficiency, competition, and capital formation"—was even less explicable.

The language of Section 106, to begin, is not that of conventional cost-benefit analysis. Where Congress has sought such an analysis, it knows how to make itself clear. The Safe Drinking Water Act (SDWA) thus required findings as to the "[q]uantifiable and non-quantifiable health risk reduction benefits" and the "[q]uantifiable and nonquantifiable costs for which there is a factual basis in the rulemaking record." In the Unfunded Mandates Reform Act (UMRA), analogously, Congress mandated a "qualitative and quantitative assessment of the anticipated costs and benefits." Each of those provisions was adopted within a year of the NSMIA, moreover, suggesting Congress knew what it was doing when it drafted Section 106. Beyond its language, the legislative context of Section 106, its relative obscurity, and the distinctive inquiry it demands all add to the mystery of its forceful application in Business Roundtable.

Given the foregoing, it is hardly surprising that Section 106 has been the subject of close scholarly and practitioner attention ever since the Business Roundtable decision. With its peculiar syntax, regulatory context, and legislative history, however, it has not lent itself to ready understanding. Scholarly analysis to date has thus explored it as an odd mutation of the Supreme Court's "hard look" standard for judicial review of agency action—as a reinterpretation of sorts of the Administrative Procedure Act's provision for "arbitrary and capricious" review. But this approach obscures more than it reveals.

Instead, this Article analyzes Section 106—consistent with its legislative history, with the SEC's approach to it, and with the D.C. Circuit's implicit treatment of it—as a cost-benefit mandate, but of a distinct sort. Business Roundtable was correct to analyze Section 106 as a cost-benefit provision—and even as an enumeration of factors for SEC consideration—but wrong in its assessment of what such a conception of the provision entailed. In addressing that misunderstanding, we may better engage the high stakes of the decision for SEC rulemaking in the years ahead. If the promise of the Dodd-Frank

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30 See infra Part I.B.1 (describing the adoption of Section 106).
Act is to be realized—an open question after Business Roundtable—and it is essential to properly understand the decision and both the demands and the limits of cost-benefit analysis under Section 106.

As suggested above, though, Business Roundtable is no less important for students of administrative law generally than it is for experts in financial regulation. Beyond its immediate implications for the SEC, the extension of cost-benefit analysis to financial regulation demands an evaluation of cost-benefit analysis more generally. In extending cost-benefit analysis into new territory, Section 106 requires us to codify a more diverse range of functions for cost-benefit analysis, beyond the traditional assertion of increased efficiency. Equally important, it requires us to tease out diverse modalities of cost-benefit analysis in actual practice, revealing far greater variance in its actual application as a decision tool than commonly acknowledged.

To explore these issues, I proceed as follows: Part I offers a brief introduction to cost-benefit analysis as it has been conventionally understood and outlines the origins and content of Section 106. As the immediate impetus for, though not the full context of, the analysis offered herein, Part I also briefly reviews the decision in Business Roundtable.

With that background, the Article explores cost-benefit analysis generally—in Parts II and III—before turning back to Section 106 in

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32 See John C. Coffee, Jr., The Political Economy of Dodd-Frank: Why Financial Reform Tends to Be Frustrated and Systemic Risk Perpetuated, 97 CORNELL L. REV. 1019, 1065–66 (2012) (arguing that Business Roundtable “cast a substantial cloud over the SEC’s continuing ability to adopt other rules in implementing the Dodd-Frank Act”); see also Case Note, supra note 18, at 1088 (noting that Business Roundtable’s approach “all but bars contested reforms”); Protess, supra note 16 (commenting that the D.C. Circuit’s decision “does not bode well for several other Dodd-Frank rules”). The implications of Business Roundtable thus run to agencies beyond the SEC as well. See Kraus & Raso, supra note 14, at 1 (“Other financial regulators are alarmed, and with good reason, since their economic analyses of their own rules are generally less sophisticated than the SEC’s.”); see also Curtis W. Copeland, Economic Analysis and Independent Regulatory Agencies 57–58 (2013), available at http://www.acus.gov/report/economic-analysis-report-draft (pointing to cases brought by business groups against other agencies that cite Business Roundtable); Hal Weitzman, CME Group Chief Donohue Hits at Washington Regulators, FINANCIAL TIMES, Sept. 1, 2011, at 18 (addressing effects of the decision on the Commodity Futures Trading Commission).

33 In particular, as David Arkush argues, it is critical that the SEC stake out a clear position on the proper application of cost-benefit analysis in financial regulation. See David J. Arkush, Status-Quo Bias in the Cost-Benefit Analysis of Financial Regulation 1 (Mar. 15, 2013) (unpublished manuscript) (on file with the New York University Law Review); cf. Richard L. Revesz & Michael A. Livermore, Retaking Rationality: How Cost-Benefit Analysis Can Better Protect the Environment and Our Health (2008) (arguing for use of cost-benefit analysis in support of regulatory initiatives); Kraus & Raso, supra note 14, at 42 (noting faults in the current conception of cost-benefit analysis and arguing for a new approach that is more favorable to regulation). The analysis herein might be understood to offer a framework for it to do so.
particular and financial regulation more broadly, in the final two parts. Stepping beyond the conventional debate among administrative law scholars over the normative wisdom of cost-benefit analysis, Part II offers a typology of the multiple (and sometimes conflicting) purposes that cost-benefit analysis might be understood to serve in any given case. While "efficiency" is usually asserted as the goal, there turn out to be various forms of efficiency that cost-benefit analysis might help to promote. Equally important, there are crucial non-efficiency functions that cost-benefit analysis may serve as well.

Going beyond the function of cost-benefit analysis, I turn to consider questions of its form and application. As with questions of function, the study of cost-benefit analysis has tended to approach it as a standard-form procedure, to be applied or not applied in different settings, but with limited differences in form. Suggesting a greater diversity of forms under the common umbrella of cost-benefit analysis, Part III explores four sets of questions to be weighed in determining the appropriate form of any given cost-benefit analysis: the source of law for the relevant requirement, the nature of the agency responsible for conducting the analysis, the nature of the problem at issue, and the nature of the variables to be evaluated.

Across the study of cost-benefit analysis generally, the foregoing offers a distinct approach to the application and evaluation of any given cost-benefit analysis provision. Especially as such applications are extended across more diverse subject-matter areas of administrative regulation, a systematic framework for evaluating the appropriate function and form of the particular cost-benefit analysis requirement at issue will be essential to its effective application. But what of Section 106 particularly, and financial regulation more generally?

Of particular relevance to securities law scholars, Part IV brings the framework articulated in Parts II and III to bear on Section 106's charge to the SEC to consider the impact of its rulemaking on "efficiency, competition, and capital formation."

First, it identifies a

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34 To be sure, the contrast between cost-benefit analysis and the casual consideration of arguments for and against relevant policy choices—occasionally with citation to Benjamin Franklin—is sometimes acknowledged. Cf. Int'l Union v. OSHA, 938 F.2d 1310, 1321 (D.C. Cir. 1991) (drawing connection between Franklin and cost-benefit analysis); PAUL ROSE & CHRISTOPHER J. WALKER, THE IMPORTANCE OF COST-BENEFIT ANALYSIS IN FINANCIAL REGULATION 11 (2013) (describing Franklin's admonition); John O. McGinnis, Presidential Review as Constitutional Restoration, 51 DUKE L.J. 901, 940 n.177 (2001) (suggesting that cost-benefit analysis flows from Benjamin Franklin's suggestion that policy decisions be made after weighing relevant advantages and disadvantages). As often as not, however, the point of that contrast is not to identify varied forms of cost-benefit analysis, but to distinguish it from what it is not.

largely *nonefficiency* explanation of Section 106's functions. Properly understood, Section 106 is a mandate of cost-benefit analysis, but it is not—in primary part—about increasing efficiency, reducing cognitive biases, increasing transparency, facilitating agency monitoring, or any of a number of other potential functions outlined in Part II. Rather, echoing the *Business Roundtable* decision—at least as interpreted in the most generous light—Section 106 is best understood as an unusual means for Congress to force SEC consideration of substantive factors not prioritized by its organic statutes, *nor capable of ready incorporation into those statutes*.

Drawing on that function, together with the findings as to form suggested by application of Part III's framework questions to Section 106, Part IV concludes by offering a distinct account of the proper conduct and review of the analysis prescribed by Section 106. Successively, it describes a narrow duty to consider, but not necessarily regulate in accord with, Section 106's factors; a distinct form of cost-benefit analysis, characterized by careful attention to the distributional dynamics at work, a lesser emphasis on rigid quantification, and no demand to "balance" the operative factors in some mechanistic fashion; and a high degree of judicial deference to the agency's analysis, cabined by a limited framework of judicial review.

Part V concludes, suggesting the value of finding a place for cost-benefit analysis in financial regulation generally, for at least three reasons: its contribution to the complex balancing exercise at the heart of financial market regulation, its potential to address both the reality and the perception of interest group influence in the design of financial rules, and its capacity to reduce the cognitive biases that underlie systemic risk on the financial markets. As elsewhere, cost-benefit analysis in financial regulation is bound to generate disagreements—and even controversy. Key design features may help to limit the latter, or at least maximize the prospect that the benefits of cost-benefit analysis in financial regulation outweigh its costs. Among other characteristics, I suggest in Part V that integration of a broader range of factors, a clear enumeration of relevant considerations (including especially systemic risk and distributional concerns), and judicial review targeted to procedural rather than substantive duties should define the parameters of cost-benefit analysis in financial regulation. In the regulation of financial markets, as elsewhere, cost-benefit analysis may foster efficient ends or be paralyzing. By embracing a discourse of cost-benefit analysis focused on the diversity of functions it may serve and the varied forms it may take, we are far more likely to encourage the former—and to avoid the latter.
I

COST-BENEFIT ANALYSIS:
FROM RISK REGULATION TO SECURITIES REGULATION

Although requirements of cost-benefit analysis have been in the U.S. Code since the 1930s, recent decades have seen a dramatic expansion in its use among both executive and independent agencies. Its subject-matter reach has also grown, as it has found application beyond its original core of agencies operating in the realm of risk regulation, including the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the National Highway Traffic Safety Administration (NHTSA), and others. Most recently, it has secured an important foothold in the hitherto insulated realm of financial regulation. After outlining the origins and traditional application of cost-benefit analysis, I explore that extension more closely—including its unexpected intersection with the SEC's efforts to implement the Dodd-Frank Act.

A. The Origins and Embrace of Cost-Benefit Analysis

Cost-benefit analysis mandates in U.S. law can be traced to the 1936 Flood Control Act, which required agencies to evaluate the economics of proposed flood control projects. Over the ensuing decades, scholars and policymakers sought to apply cost-benefit analysis to a variety of regulatory sectors, from workplace safety to military spending. With the rapid growth in federal environmental law in the 1970s, however, the future of cost-benefit analysis grew murky. Given the challenges of valuing environmental goods and human life, cost-benefit analysis seemed increasingly out-of-place.

The election of President Ronald Reagan, however, gave cost-benefit analysis a new lease on life. Within weeks of taking office, Reagan issued Executive Order 12,291, directing that "regulatory action shall not be undertaken unless the potential benefits to society for the regulation outweigh the potential costs to society." The order was greeted with substantial protest, on varied grounds. Some

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decried it as a nontransparent means of deregulation; others objected
to its aspiration to quantify the immeasurable; and some questioned
the rigidity of the cost-benefit analysis it prescribed and its potential
to foster abuse of the rulemaking process.\footnote{41}

Notwithstanding these and other objections, the practice of cost-
benefit analysis took hold and persisted, even after the White House
changed hands.\footnote{42} Rather than abandoning the requirement, President
Bill Clinton issued Executive Order 12,866, charging agencies to
"assess both the costs and the benefits of [any] intended regulation."\footnote{43} Clinton's order thus preserved the basic requirement of cost-benefit
analysis, giving agencies greater leeway to rely on nonquantifiable
grounds of decision, but otherwise modifying only details of its
application.\footnote{44}

In the years since Reagan's executive order, the practice of cost-
benefit analysis has thus permeated the federal regulatory system—
though with greatest force at those agencies responsible for human
health and safety. Various legislative attempts to mandate cost-benefit
analysis universally have failed to clear Congress, as have a number of
bills applying it to one or another particular agency.\footnote{45} Many important
pieces of cost-benefit analysis legislation have been successfully
enacted, on the other hand, including the UMRA and the NSMIA
provision of interest herein.\footnote{46}

With its now long history and embrace across the political spec-
trum,\footnote{47} the place of cost-benefit analysis in regulatory analysis would
today seem secure. Across a wide range of government agencies—

\footnote{41 See Philip Shabecoff, Reagan Order on Cost-Benefit Analysis Stirs Economic and
Political Debate, N.Y. TIMES, Nov. 7, 1981, at 2:28 (noting various critiques of cost-benefit
analysis).
\footnote{42 Posner, supra note 40, at 1139.
\footnote{44 See Peter M. Shane, Political Accountability in a System of Checks and Balances: The
Case of Presidential Review of Rulemaking, 48 ARK. L. REV. 161, 176-78 (1994) (reviewing
terms of Clinton's executive order); Sidney A. Shapiro, Political Oversight and the
Deterioration of Regulatory Policy, 46 ADMIN. L. REV. 1, 36-37 (1994) (describing the Vice
President's role in overseeing the Office of Information and Regulatory Affairs (OIRA)
under Clinton's executive order). In particular, Clinton's order altered the framework of
political oversight over agencies' cost-benefit analyses and the associated level of trans-
parency. See Shapiro, supra, at 39 (noting that Clinton's order ended "much of the secrecy
that marred White House oversight in the two prior administrations").
\footnote{45 Johnston, supra note 15, at 1345 & n.7.
\footnote{46 The practice of cost-benefit analysis has increasingly spread to the state level as well.
Posner, supra note 40, at 1139-40.
\footnote{47 President Obama made only limited changes to the Clinton-era executive order,
including several designed to expand its reach. See Exec. Order No. 13,563 § 1(c), 3 C.F.R.
215, 216 (2011) (directing agencies to consider even values that are difficult or impossible
to quantify).}
including some for whom it is not even required—cost-benefit analysis is now conducted as a matter of course.48 These agencies routinely engage in a “systematic enumeration of all benefits and all costs, tangible and intangible,”49 associated with their regulatory undertakings.50 As prescribed by Executive Order 12,866, they variously weigh the “functioning of the economy and private markets, the enhancement of health and safety, the protection of the natural environment, and the elimination or reduction of discrimination or bias”51—even as they pursue the dictates of their particular regulatory missions.

Yet controversy about the use of cost-benefit analysis persists. Consider the contentious establishment of a new “maximum contaminant level” (MCL) for arsenic in drinking water rushed through in the waning days of the Clinton Administration, and undone immediately thereafter (at least for a time) by the Bush Administration.

In 1942, federal regulators established an MCL for arsenic of 50 parts per billion (ppb). Fifty-four years later, after being directed by Congress to set a new arsenic standard by 2000, the EPA asked the National Resource Council (NRC) of the National Academy of Sciences to conduct an independent review of the arsenic toxicity data and recommend any appropriate changes to the standard. Relying upon one of several published studies—each pointing to different conclusions—the NRC ultimately recommended a reduced arsenic level, of 10 ppb. Recommendation in hand, the EPA issued a new MCL at

48 See Posner, supra note 40, at 1139 n.15 (noting a dramatic increase in Federal Register references to cost-benefit analysis between 1980 and 1999).


Guidelines from the Office of Management and Budget prescribe the process that agencies should follow in conducting cost-benefit analyses. See Office of MGMT. & BUDGET, Circular A-4: Regulatory Analysis 1 (2003), available at http://www.whitehouse.gov/sites/default/files/omb/assets/regulatory_matters_pdf/a-4.pdf. First, the agency should present the monetized costs and benefits of the action. Second, it should present costs and benefits that are quantified but cannot be monetized. Third, it should present a description of qualitative data used in the analysis. Finally, the agency should present surveys and other data it relied upon for estimates in the analysis. Id. at 18.
that level, alongside an evaluation of the costs and benefits of various potential MCL levels.\(^{52}\)

In a January 20, 2001 memorandum from Andrew Card, chief of staff to newly inaugurated President Bush, however, the EPA was directed to delay the effective date of the new rule for 60 days, from March 23, 2001 to May 22, 2001.\(^{53}\) On the latter date, in turn, a further delay was imposed, to February 22, 2002.\(^{54}\) The EPA then initiated an additional cycle of review, including a request to the National Academy of Sciences to review the findings of the NRC.\(^{55}\) It also requested the National Drinking Water Advisory Council to review the costing methodologies, assumptions, and data used in the original rulemaking.\(^{56}\) As for benefits, finally, it charged the newly convened Arsenic Rule Benefits Review Panel to conduct further review.\(^{57}\) On March 25, 2003, two years after the original effective date, the EPA finally affirmed the 10 ppb standard and put it into effect.\(^{58}\)

The tortuous path to a new standard for arsenic contamination—and the central role that cost-benefit analysis played in that process—has been widely cited by critics of the practice. As Lisa Heinzerling put it shortly afterwards, the entire process seemed "inexplicable."\(^{59}\) More generally, the case of arsenic regulation can be seen to highlight the ambiguities of cost-benefit analysis as a decision procedure. If, as even advocate of cost-benefit analysis Cass Sunstein argued, it could only suggest a range of 0 to 112 lives saved (and monetary savings of between $0 and $560 million) with a lowered MCL,\(^{60}\) how much work can cost-benefit analysis really be understood to do in regulatory decisionmaking?

Much of this debate has played out in the academic literature—including among scholars who have straddled the line between the theory and practice of cost-benefit analysis.\(^{61}\) Yet for all the vigor of


\(^{55}\) Id. at 28,345.

\(^{56}\) Arsenic and Clarifications to Compliance and New Source Contaminants Monitoring: Delay of Effective Date, 66 Fed. Reg. 37,617, 37,621 (July 19, 2001).

\(^{57}\) Id. at 37,622.


\(^{60}\) Sunstein, supra note 52, at 2283.

\(^{61}\) Among the leading critics of cost-benefit analysis are Professors Lisa Heinzerling, Doug Kysar, Thomas McGarity, Christopher Schroeder, and others. See, e.g., FRANK ACKERMAN & LISA HEINZERLING, PRICELESS: ON KNOWING THE PRICE OF EVERYTHING
the scholarly debate, it has inadequately attended to certain crucial questions. For the most part, legal scholars have focused their attention on whether cost-benefit analysis is appropriate—especially in the regulation of human health and safety—rather than exploring questions of its potential form, or even its precise function in one setting versus another.62 Even where the literature does engage with the form cost-benefit analysis might take, it most often does so only in the service of proving or disproving its normative wisdom.63

Perhaps because of this emphasis on the normative question of cost-benefit analysis as good or bad, the academic study of cost-benefit analysis has also tended to approach the practice as a fairly singular phenomenon. This begins with the casual assumption—by most, but not all—of broadly-defined “efficiency” as the primary function of cost-benefit analysis.64 Equally important, scholars have commonly engaged cost-benefit analysis as a singular method of decisionmaking, rather than an umbrella encompassing an array of related, but distinctly operationalized, approaches to considering the costs and benefits of alternative regulatory choices.65 As I will argue


65 See, e.g., McGarity, supra note 63, at 2342–45 (offering an account of the nature of cost-benefit analysis generally); Sunstein, supra note 52, at 2256–60 (same). Richard Revesz and Michael Livermore might be seen as something of an exception to this rule. See
herein, it is essential that we be more ecumenical in our evaluation and application of cost-benefit analysis, both with regard to its functions and its forms. In certain settings, in the service of certain goals, and in certain forms, cost-benefit analysis may be an invaluable tool. In other settings, with different goals, and in a distinct form, it may be a grave threat. Without greater attention to the heterogeneity of cost-benefit analysis’s functions and forms, the discourse around it can only get us so far.

B. Costs, Benefits, and the Efficiency of Financial Regulation

Notwithstanding the seeming attractions of an analysis of regulatory costs and benefits in—of all places—the financial markets, such analysis has not traditionally been a focus of U.S. securities regulation, even as it has grown in importance in other areas. Beginning in the 1970s, the SEC started to conduct cost-benefit analyses, though only voluntarily, and with no particular consistency in the nature, form, or quality of its analysis. Perhaps for that reason, the SEC’s efforts received little or no attention—from scholars, the courts, or even critics of the Commission’s regulatory choices.

Revesz & Livermore, supra note 33. In encouraging advocates of enhanced regulation to engage (rather than resist) the use of cost-benefit analysis, they suggest the potential for it to take distinct forms. Id. at 9–19. Their analysis, however, would appear to construe this variation as involving a deviation from the proper form of cost-benefit analysis. Separately, one might understand the Supreme Court’s decision in Entergy Corp. v. Riverkeeper, 556 U.S. 208 (2009), to acknowledge (at least implicitly) the potential for a multiplicity of valid forms of cost-benefit analysis. The Supreme Court, 2008 Term—Leading Cases, 123 Harv. L. Rev. 153, 346–47 (2009).

66 In a sense, the acknowledgement of multiple functions and forms of cost-benefit analysis that I recommend herein can be understood as an embrace of the “agency-specific precedents” in administrative law that Levy and Glicksman identify—and cautiously endorse—in recent work. See Richard E. Levy & Robert L. Glicksman, Agency-Specific Precedents, 89 Tex. L. Rev. 499 (2011) (describing the manifestation of agency-specific precedents and their normative implications).

67 See Revesz & Livermore, supra note 33, at 44 (noting potential wisdom or disutility of cost-benefit analysis, depending on context); Rose-Ackerman, supra note 61, at 341–51 (suggesting limitations of cost-benefit analysis as to certain types of policy issues).


Against this backdrop, Section 106 of the NSMIA—an act primarily directed at preempting state securities law—tacked a single sentence onto the end of the “definitions” sections of the Securities Act of 1933, the Securities Exchange Act of 1934, and the Investment Company Act of 1940:

Whenever pursuant to this title the Commission is engaged in rulemaking and is required to consider or determine whether an action is necessary or appropriate in the public interest, the Commission shall also consider, in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation.70

For nearly a decade thereafter, that sentence was forgotten—sometimes even within the SEC, but invariably outside it. In recent years, however, it has emerged as a new front in the application of cost-benefit analysis, and in fights over the SEC’s attempts to respond to the recent financial crisis and the scope of financial regulation more generally.71

1. The Adoption of Section 106

After securing majorities in both houses of Congress in 1994, the newly installed Republican leadership established an aggressive agenda of legislative reform. Among its priorities—if not a first-order one—was a desire to transform both the substantive content and the procedures of regulatory rulemaking.72 This goal inspired an array of legislative proposals—relatively few of which were ultimately enacted


71 Besides Section 106, another largely overlooked provision is Section 23(a)(2) of the Securities Exchange Act, which requires the SEC to consider the impact of its rulemaking on competition and to articulate its basis for concluding that any negative impact thereon is warranted. See Current Guidance, supra note 69, at 3 (noting additional dictates on SEC decisionmaking); see also id. at 3 n.7, 11 n.32 (same); Copeland, supra note 32, at 38 (same). In critical respects, the analysis herein bears upon the application of Section 23(a)(2) as well.

Among the success stories, however, was an obscure provision of the National Securities Markets Improvement Act of 1996. Primarily directed at preempting state securities law, the NSMIA also required the SEC to "consider, in addition to the protection of investors, whether [its proposed] action will promote efficiency, competition, and capital formation." Specifically, the Act amended the Securities Act of 1933, the Securities Exchange Act of 1934, and the Investment Company Act of 1940—three of the four key statutes administered by the SEC—to append this language at the end of their definitions sections.

Looking to the language of Section 106 alone, it is not obvious it demands all that much of the SEC. Consider, to begin, the contrast between the SEC's obligation merely to "consider" the implications of a proposed rule for efficiency, competition, and capital formation, with the directive to do so in any case in which it is required to "consider or determine whether an action is necessary or appropriate in the public interest." Section 106 makes no explicit reference to "costs" or "benefits," meanwhile, in contrast with Congress's explicit invocation of cost-benefit analysis only the year before, in the UMRA—and

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74 See Mongone, supra note 16, at 789-91 (noting preemption of state securities law and regulation of mutual fund industry as primary motivations of the NSMIA).
75 See National Securities Markets Improvement Act of 1996 § 106.
76 Three years later, by way of another piece of legislation primarily directed to other ends—the Gramm-Leach-Bliley Act, which famously (or infamously) undid the separation of investment and commercial banking codified by the Glass-Steagall Act of 1933—Congress addressed the NSMIA's failure to integrate the analysis of "efficiency, competition, and capital formation" into the Investment Advisers Act of 1940 as well. See Cox & Baucom, supra note 14, at 1822 (noting that the conference report accompanying the bill rebuked the SEC for failing the properly implement the NSMIA's review standards). Again, however, it did so by simply adding the requirement at the tail end of the definitions section. See id. (noting the nature of statutory amendment).
Further evidence of the less than careful drafting of Section 106 might be seen in its puzzling limitation of the scope of its application. Read literally, Section 106 would be applicable only in situations where the SEC "is required to consider or determine whether an action is necessary or appropriate in the public interest." National Securities Markets Improvement Act of 1996 § 106. Yet many of the most important rulemaking provisions in securities law require the SEC to determine whether a rule is justified by the public interest or is in the interest of investors. Notably, in this regard, Congress's authorization of SEC rulemaking on proxy access in the Dodd-Frank Act directed the Commission to proceed "under such terms and conditions as [it] determines are in the interests of shareholders and for the protection of investors." Dodd-Frank Wall Street Reform and Consumer Protection Act § 971(b), Pub. L. No. 111-203, 124 Stat. 1376, 1915 (2010) (codified as amended at 15 U.S.C. § 78n(a) (2012)) (emphasis added).
77 National Securities Markets Improvement Act of 1996 § 106 (emphasis added); see also Coffee, supra note 32, at 1066 (explaining that the language of Section 106, on its face, only instructs the SEC to consider these impacts); Mongone, supra note 16, at 769 (same).
the very same year, in the Safe Drinking Water Act Amendments of 1996. In adopting Section 106, moreover, Congress rejected the Senate's version of the bill, which would have imposed a higher standard of economic analysis on the SEC, mandating that its chief economist produce a report (a) analyzing "the likely effects of the proposed regulation on the economy of the United States, and particularly upon the securities markets and the participants in those markets" and (b) detailing "the estimated impact of the proposed regulation upon economic and market behavior, including any impact on market liquidity, the costs of investment, and the financial risks of investment."

Other strands of the legislative history, by comparison, suggest Congress expected some kind of cost-benefit analysis under Section 106. In particular, the House Report accompanying the NSMIA noted the Committee's "expect[ation] that the Commission will engage in rigorous analysis pursuant to this section." Further, it indicated that, in considering efficiency, competition, and capital formation, "the Commission shall analyze the potential costs and benefits of any rulemaking initiative, including, whenever practicable, specific analysis of such costs and benefits." House Commerce Committee Chairman Tom Bliley, meanwhile, described Section 106 as mandating a "meaningful cost-benefit analysis" of any proposed rule. Three years later, further suggestion of Congress's expectations came in the Conference Report to the Gramm-Leach-Bliley Act, with its rebuke of the SEC for inadequate analysis under Section 106 to date. Confirming the complex character of Section 106, however, the report criticized the SEC even as Congress appended—without adjustment—the precise language of Section 106 into the Investment Advisers Act.

80 Id.
81 See Mongone, supra note 16, at 755 & n.41 (reviewing legislative history).
83 Id. Consistent with the statute itself, the House Report also makes clear that the SEC's analysis of efficiency, competition, and capital formation should be conducted "without compromising investor protection." Id. (quoting H.R. REP. No. 104-622, at 16 (1996), reprinted in 1996 U.S.C.C.A.N. 3877, 3878).
84 Id. at 1822-23 (quoting 142 CONG. REC. 25,810 (1996)).
86 See supra note 76 and accompanying text.
2. The Application of Section 106

Perhaps unsurprisingly, given this ambiguous terrain, the SEC has applied Section 106 (and its extension to the Investment Advisers Act) with some uncertainty. SEC analysis of efficiency, competition, and capital formation, to begin, has to date been conducted separate and apart from its consideration of the costs and benefits of proposed regulatory initiatives. Its cost-benefit analysis has tended to be far more detailed than its analysis under Section 106, meanwhile, notwithstanding the entirely voluntary nature of the former.

At least in part, this approach may be explained by the SEC's treatment of the analysis of efficiency, competition, and capital formation as a species of cost-benefit analysis—particularly in its assessment of efficiency. Not uncommonly, the SEC has simply referred back to the same sources—and analysis—in discussing a proposed rule's potential implications for efficiency, as it earlier offered in analyzing costs and benefits. Perhaps similarly seeking to echo its more structured analysis of costs and benefits, SEC assessments under Section 106 have also tended to go beyond mere "consideration," instead

87 For purposes of simplicity, I reference the provision for the SEC's consideration of efficiency, competition, and capital formation in Section 106 of the NSMIA. That provision was codified in separate sections of the Securities Act of 1933, the Securities Exchange Act of 1934, and the Investment Company Act of 1940. See supra notes 70, 76 and accompanying text. Thereafter, the Gramm-Leach-Bliley Act codified the identical language in the Investment Advisers Act of 1940. See id.

88 See Kraus & Raso, supra note 14, at 6 (noting that the SEC began including a separate section regarding efficiency, competition, and capital formation concerns after passage of the NSMIA). The adopting release for the proxy access rule, for example, included separate sections for cost-benefit analysis and for the impact of the rule on efficiency, competition, and capital formation. Facilitating Shareholder Director Nominations; Final Rule, 75 Fed. Reg. 56,668, 56,753-76 (codified at 17 C.F.R. pt 240.14a-11) (Sept. 16, 2010). It bears noting, though, that this has begun to change. See Kraus & Raso, supra note 14, at 31 (noting that the SEC began integrating cost-benefit analysis and its evaluation of efficiency, competition, and capital formation concerns after Business Roundtable).

89 See Kraus & Raso, supra note 14, at 6, 10 (noting relatively cursory and largely duplicative nature of SEC analysis of efficiency, competition, and capital formation in the past, which sometimes consisted of no more than an invitation for public comment on Section 106's enumerated factors). But see id. at 14 (noting improvements in quality of SEC's analysis over time).

offering an affirmative conclusion as to the proposed regulation's promotion of efficiency, competition, and capital formation—a potentially problematic expansion of its obligations under Section 106, as we shall see.91

3. Judicial Review of SEC Analysis Under Section 106

Historically, the SEC has been fairly insulated from judicial review and constraint. With only a handful of exceptions—most directed to the SEC's jurisdiction to enact certain rules, rather than to the content of those rules or its decisionmaking procedures—the Commission has enjoyed relatively free rein from the courts.92 Of particular relevance herein, decades of cost-benefit analysis by the agency have not given rise to any direct reversal.93 For nearly a decade, the same was true of the SEC's analysis of efficiency, competition, and capital formation under Section 106. In recent years, however, the D.C. Circuit has invoked that requirement to vacate and remand significant SEC rulemaking initiatives on multiple occasions.94 Most notable was the court's decision in Business Roundtable v. SEC.95 The rule at issue therein—giving select shareholders access to the proxy to nominate directors—had been the subject of substantial analysis and debate.96 It had been taken up in a series of proposed rulemakings.97 In the Dodd-Frank Act, Congress explicitly authorized

91 See Cox & Baucom, supra note 14, at 1839-40 (critiquing the SEC for offering conclusions under Section 106, rather than simply outlining its analysis).
93 The SEC's conduct of cost-benefit analysis, in fact, has rarely even been subject to review—regardless of the ultimate outcome. See supra note 11 and accompanying text. This should perhaps come as little surprise, however, given the limited judicial attention to agencies' cost-benefit analyses more generally.
94 See Bus. Roundtable v. SEC, 647 F.3d 1144 (D.C. Cir. 2011); Am. Equity Inv. Life Ins. Co. v. SEC, 613 F.3d 166 (D.C. Cir. 2009); Chamber of Commerce v. SEC, 412 F.3d 133 (D.C. Cir. 2005). In each of the three cases heard by the D.C. Circuit, it is perhaps interesting to note that the appellant was represented by the same attorney, Eugene Scalia. See Jamila Trindle, Another Scalia Vexes Regulators, WALL ST. J., Oct. 2, 2012, at C1 (noting common representation of petitioners across all three cases). Judge Douglas Ginsburg, meanwhile, authored two of the three opinions and sat on the panel that decided the third. Bus. Roundtable, 647 F.3d at 1146; Am. Equity, 613 F.3d at 167; Chamber of Commerce, 412 F.3d at 136.
95 647 F.3d 1144 (D.C. Cir. 2011).
97 See id. (discussing those proposed rulemakings); see also Facilitating Shareholder Director Nominations, 74 Fed. Reg. 29,024 (proposed June 18, 2009) (codified at 17 C.F.R. pts. 200, 232, 240, 249 and 274 (2010)) (proposing changes to federal proxy rules).
the SEC to adopt the rule.\textsuperscript{98} And after more than 600 comments and various revisions to the proposed rule based thereon,\textsuperscript{99} the SEC promulgated a final rule in August 2010.\textsuperscript{100}

Immediately upon its enactment, however, Rule 14a-11 was challenged by the Business Roundtable and the Chamber of Commerce on the grounds that its adoption violated the Administrative Procedure Act, as well as the Constitution's protections of federalism and free speech. And on July 22, 2011, in a fairly cursory, thirteen-page opinion, the D.C. Circuit agreed—not merely remanding the case, but taking the unusual step of vacating the rule as well.\textsuperscript{101} For scholars of administrative law, however, the substance of \textit{Business Roundtable v. SEC} was even more surprising than its procedural disposition.

Given the broad deference owed to agencies under the Supreme Court's "hard look" standard of review, as articulated in the \textit{State Farm} decision,\textsuperscript{102} the D.C. Circuit's characterization of the SEC's

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\textsuperscript{99} See \textit{Hayden & Bodie, supra} note 18, at 106 (noting revision of proposed rule in response to comments).

\textsuperscript{100} See \textit{supra} notes 19–23 and accompanying text (describing the enactment of Rule 14a-11); see also \textit{Mark J. Roe, The Corporate Shareholder's Vote and Its Political Economy, in Delaware and in Washington}, 2 HARV. BUS. L. REV. 1, 13 (2012) (outlining provisions of the SEC's final rule); \textit{cf.} Marcel Kahan & Edward Rock, \textit{The Insignificance of Proxy Access}, 97 VA. L. REV. 1347, 1347 (2011) (observing that the vote to grant shareholders proxy access was close and divided along partisan lines). For varied critiques of the merits of the SEC's proposed proxy access rule, see \textit{Fisch, supra} note 96; \textit{Joseph A. Grundfest, The SEC's Proposed Proxy Access Rules: Politics, Economics, and the Law}, 65 BUS. L. REV. 361 (2010); \textit{Thomas Stratmann & J.W. Verret, Does Shareholder Proxy Access Damage Share Value in Small Publicly Traded Companies?}, 64 STAN. L. REV. 1431 (2012). It bears noting that the possibility of shareholder access to the proxy had been debated by the SEC as far back as 1942. \textit{Fisch, supra} note 96, at 437.

\textsuperscript{101} \textit{Bus. Roundtable v. SEC}, 647 F.3d 1144, 1156 (D.C. Cir. 2011). On September 6, 2011, the SEC announced that notwithstanding the importance of proxy access—and even its place as the first SEC rule enacted under the Dodd-Frank Act—the Commission would not appeal the D.C. Circuit's difficult-to-challenge decision and would abandon the rule. \textit{See SEC News Release, supra} note 23 (stating that the SEC would not seek a rehearing or Supreme Court review of the D.C. Circuit's decision). However, the SEC has clarified the status of the proxy access amendments to Rule 14a-8, which were finalized at the same time as Rule 14a-11, maintaining that 14a-8 was unaffected by the court's ruling. \textit{See SEC Staff Legal Bulletin No. 14G} (Oct. 16, 2012), \textit{available at} http://www.sec.gov/interps/legal/cfslb14g.htm (noting continued validity of Exchange Act Rule 14a-8).

analysis as "arbitrary and capricious" appeared to constitute a significant departure from past precedent. Especially as imposed on the SEC—an independent agency that had historically enjoyed wide latitude in its rulemaking—Business Roundtable prompted many to question whether the court was asserting a newly heightened standard of review for agency action.103

What may have been most surprising about Business Roundtable, however, was its reliance on Section 106 as the basis of decision. Attenuated as many of the appellants' other claims may have been, the court's reliance on Section 106 was in some ways even more problematic. As wide as the discretion granted to administrative agencies in general, judicial deference to agencies' cost-benefit analysis has always been even greater.104 The rejection of agency rulemaking on the basis of inadequate cost-benefit analysis is thus exceedingly rare. As to many statutes and the executive order prescribing cost-benefit analysis, judicial review is not even permitted.105 One might have expected even greater judicial deference under Section 106, then, given its mere demand for "consideration," its cursory nature, and its failure to even invoke the rhetoric of "costs" and "benefits."

Few, to be sure, took the view that the SEC's analysis of the impact of Rule 14a-11 on efficiency, competition, and capital

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103 See, e.g., Brown, supra note 22 ("The decision far exceeded the standards set out by Congress and the courts with respect to cost/benefit analysis."); Cox & Baucom, supra note 14, at 1813 (reporting "that the level of review invoked by the D.C. Circuit in Business Roundtable and its earlier decisions is dramatically inconsistent with the standard enacted by Congress"); Davidoff, supra note 27 (noting that the Business Roundtable "opinion appears to create an almost insurmountable barrier for the S.E.C. by requiring that it provide empirical support amounting to proof that its rules would be effective"); Murphy, supra note 31, at 163 (noting that the standard of review adopted by the court "veers widely from the traditional arbitrary and capricious review"); David Zaring, More on the DC Circuit's Proxy Access Decision, THE CONGLERATE (Aug. 4, 2011), http://www.theconglomerate.org/2011/08/the-dc-circuits-proxy-access-decision-keeps-getting-attention-see-here-for-a-roundup-and-here-from-elliott-spitzer-seem.html ("The [court's analysis of the SEC's failure to consider the economic consequences of its actions is probably best characterized as fly-specking, and the kind of searching inquiry no agency could survive."); see also Stanley Keller, What Now for Proxy Access?, HARV. L. BLOG (Aug. 18, 2011, 9:29 AM), http://blogs.law.harvard.edu/corpgov/2011/08/18/what-now-for-proxy-access (expressing concern about the "impossible . . . bar the [court set for future agency action, notwithstanding lack of sympathy for expanded proxy access]. For a sustained critique of the court's treatment of the SEC's analysis of the empirical data, see Kraus & Raso, supra note 14, at 21–24.

104 See supra note 27 and accompanying text (noting the deference that courts have traditionally shown cost-benefit analyses conducted by agencies).

105 See, e.g., 2 U.S.C. § 1571(b)(2) (2012) ("[N]o provision of this chapter shall be construed to create any right or benefit, substantive or procedural, enforceable by any person in any administrative or judicial action."); Exec. Order No. 13,563, 3 C.F.R. 215, 217 (2011) (stating that the order does not create any substantive or procedural rights, "enforceable at law or in equity by any party against the United States").
formation was beyond reproach. At a minimum, the Commission erred in failing to articulate grounds for applying the rule unvaryingly—including even to mutual funds, as to which its provisions would seem wholly inapposite.\footnote{See Bus. Roundtable v. SEC, 647 F.3d 1144, 1154–56 (D.C. Cir. 2011) (criticizing SEC’s application of Rule 14a-11 to investment companies); see also Kraus & Raso, supra note 14, at 23–24 (discussing shortcomings of the SEC’s release); Zaring, supra note 103 (noting confusion as to why Rule 14a-11 was extended to mutual funds).} One might also have expected the SEC to engage at least somewhat more closely with the costs that corporations would incur in resisting whatever subset of board nominees they chose to fight.\footnote{See Davidoff, supra note 27 (“The D.C. Circuit has a point about the [SEC’s] failure to consider fully the costs to corporations.”).} Finally, and most broadly, the SEC might have better situated its proposed rule by more forcefully articulating the market failures and broader problems associated with maintaining the status quo.\footnote{This particular failure has been emphasized by David Arkush in an unpublished work. See Arkush, supra note 33, at 4–5 (observing that the SEC might have fared better had it “done more to frame the problem”). Other shortcomings of the SEC’s analysis, however, might also be noted. See Mongone, supra note 16, at 774 (observing that “[s]ome of the SEC’s conclusions ... are naked assertions supported by no evidence”).}

The SEC’s analysis, on the other hand, was hardly superficial. On top of sixty pages of the final release dedicated to cost-benefit analysis narrowly defined, the SEC devoted another seventeen pages to its analysis of efficiency, competition, and capital formation under Section 106.\footnote{See Facilitating Shareholder Director Nominations, Securities Act Release No. 9136, Exchange Act Release No. 62,764, Investment Company Act Release No. 29,384, 99 SEC Docket 439 (Aug. 25, 2010), available at http://www.sec.gov/rules/final/2010/33-9136.pdf; see also Kraus & Raso, supra note 14, at 17–18 (describing detailed analysis of costs and benefits, and relevant literature, in the SEC’s proposing release for Rule 14a-11).} That analysis relied on peer-reviewed publications, which—by most accounts—captured the prevailing view on the questions presented.\footnote{See Kraus & Raso, supra note 14, at 17 n.90 (reviewing academic literature cited in the proposing release).} Nevertheless, the SEC took care to acknowledge, and even engage, the literature to the contrary. As for costs, the SEC devoted no less than $2.2 million to the preparation of its analysis.\footnote{Benedict, supra note 16, at 278.} Whatever the limitations of the SEC’s work, then, it is difficult to see the adoption of Rule 14a-11 as constituting so egregious a failure of cost-benefit analysis as to outweigh the significant expectation of deference owed to the Commission under the Supreme Court’s prevailing standard of review. How, then, did the court arrive at that holding?

Properly understood, the court’s conclusion rested on a certain disconnect between its formal rationale and the substance of its analysis. On its face, the D.C. Circuit’s ruling in Business
Roundtable—like the court’s earlier decisions under Section 106—cast the shortcomings of the SEC’s analysis of efficiency, competition, and capital formation as having rendered its actions “arbitrary and capricious” under Section 706 of the Administrative Procedure Act.\textsuperscript{112} In doing so, the decisions implied a failure to properly weigh substantive statutory criteria that Congress had enumerated in the agency’s governing statutes. In the words of both the Chamber of Commerce and Business Roundtable decisions, the SEC had failed in its “statutory obligation” to consider the impact of its rules on efficiency, competition, and capital formation.\textsuperscript{113}

Perhaps recognizing the strain of reading Section 106’s factors as substantive statutory criteria, however, the court’s actual analysis more closely—and correctly, I would suggest—approximates a review of the quality of the SEC’s cost-benefit analysis. Most clearly, in Business Roundtable, the court speaks of the need to “weigh[ ] the rule’s costs and benefits.”\textsuperscript{114} Elsewhere, it refers to the need to demonstrate a “net benefit.”\textsuperscript{115} In Chamber of Commerce v. SEC, the first case decided under Section 106, the court similarly spoke of the SEC’s failure to consider the costs its rule imposed on the mutual fund industry:

> Although the Commission may not have been able to estimate the aggregate cost to the mutual fund industry of additional staff because it did not know what percentage of funds with independent chairm[en] would incur that cost, it readily could have estimated the cost to an individual fund, which estimate would be pertinent to its assessment of the effect the condition would have upon efficiency and competition, if not upon capital formation.\textsuperscript{116}

With this dichotomous approach, the D.C. Circuit has generated substantial ambiguity as to the nature of Section 106—and as to what is to be expected of the SEC under it. Consistent with the substance of its language, with its legislative history, and with the SEC’s own approach to it, the D.C. Circuit saw some kind of cost-benefit analysis requirement in Section 106. Given the disconnect between its explicit requirements and a standard-form cost-benefit analysis, as well as the

\textsuperscript{112} Bus. Roundtable v. SEC, 647 F.3d 1144, 1148, 1156 (D.C. Cir. 2011).
\textsuperscript{113} Id. at 1150; Chamber of Commerce v. SEC, 412 F.3d 133, 143 (D.C. Cir. 2005).
\textsuperscript{114} 647 F.3d at 1153.
\textsuperscript{115} Id. at 1153, 1155.
\textsuperscript{116} Chamber of Commerce, 412 F.3d at 144; see also David S. Ruder, Balancing Investor Protection with Capital Formation Needs After the SEC Chamber of Commerce Case, 26 PACE L. REV. 39, 40 (2005) (noting the D.C. Circuit’s holding “that the Commission violated the Investment Company Act by failing adequately to consider the costs mutual funds would incur” (internal quotation marks omitted)); Sherwin, supra note 50 (discussing mutual fund reforms and the role of cost-benefit analysis in financial regulation).
lack of precedent for such invasive review of agency cost-benefit analysis, however, the court's formal analysis cast Section 106 as an enumeration of substantive statutory factors for the SEC to weigh in its rulemaking. Given the language of the provision, its place in each statute to which it was added, and the history and context of its adoption, neither account of Section 106 can be sustained on its own. There is surely something of a cost-benefit flavor to Section 106, but it is of a distinct species than that found in other contexts—and one that the D.C. Circuit, with its analytical gymnastics, may have actually come close to capturing. To appreciate as much, it is necessary to step back and acknowledge a broader universe of functions and forms of cost-benefit analysis than has commonly been appreciated.

II

The Function(s) of Cost-Benefit Analysis

An understanding of the ambiguous demands of Section 106—and of the increasingly varied universe of cost-benefit analysis provisions one can find across the length and breadth of federal statutory law, executive orders, and agency regulations—must begin with a more robust outline of the multiple functions that cost-benefit analysis can be understood to advance. To what ends do we engage in such analysis? What purposes do its advocates assert it to serve?

The default, usually underanalyzed response has been that cost-benefit analysis advances some broadly defined goal of "efficiency." Pressed, some might refine the scope of the promised efficiency to mean the achievement of optimal policy outcomes or results. Beyond such vague assertions, however, the precise utility of cost-benefit analysis is taken by many of its proponents as simply a given. We do well, then, to more carefully dissect cost-benefit analysis's asserted promotion of efficiency—highlighting related, but distinct, strands that might come within it—and to explore the potential nonefficiency functions that cost-benefit analysis might serve as well.

117 See supra note 64 and accompanying text.
118 See Johnston, supra note 15, at 1346 (suggesting generalized notions of the utility of cost-benefit analysis).
119 A few scholars have explored potential nonefficiency rationales for cost-benefit analysis—most primarily, Matthew Adler and Eric Posner. See Adler, supra note 64, at 271, 279 (presenting a welfarist defense of cost-benefit analysis); Adler & Posner, supra note 36 (analyzing cost-benefit analysis from legal, economic, and philosophical perspectives).
A. Efficiency Functions of Cost-Benefit Analysis

There can be little question about the potential of cost-benefit analysis to generate a certain efficiency—or at least about that aspiration's central place in the legislative and regulatory expectations of such analysis. Whether by clarifying the net benefits of a proposed rule, encouraging the better choice among competing proposals, or perhaps even highlighting rulemaking needs that might otherwise be overlooked, cost-benefit analysis may serve to enhance efficiency. To evaluate the prospect of such gains in any given case, however, it is useful to disaggregate three distinct forms of efficiency that cost-benefit analysis might be seen to promote: (1) the achievement of better outcomes, (2) the reduction of cognitive biases, and (3) more effective priority setting.

1. Efficiency as Better Ends

Most forcefully, cost-benefit analysis might be asserted to generate better outcomes under a true efficiency criterion—in which costs equal benefits. As Tom McGarity suggests, cost-benefit analysis "can lead agencies to impose only those regulatory restrictions on the private sector that increase overall allocative efficiency." In designing regulatory policy, thus, a systematic weighing of the costs and benefits might be hoped to lead an agency to the optimal one. In

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121 Thomas O. McGarity, A Cost-Benefit State, 50 ADMIN. L. REV. 7, 38 (1998); see also Cass R. Sunstein, Is Cost-Benefit Analysis for Everyone?, 53 ADMIN. L. REV. 299, 302 (2001) (observing “that it is exceedingly difficult to choose the appropriate level of regulation without looking at both the benefit and cost sides”); Sunstein, supra note 64, at 1060 (noting that “cost-benefit analysis is a way of ensuring better priority setting and of overcoming predictable obstacles to desirable regulation”). It bears noting that some have affirmatively challenged the understanding of cost-benefit analysis as advancing either Pareto or even Kaldor-Hicks efficient outcomes. See Matthew D. Adler & Eric A. Posner, Implementing Cost-Benefit Analysis When Preferences are Distorted, 29 J. LEGAL STUD. 1105, 1106 (2000) (noting that “the link between CBA and Pareto efficiency is tenuous and that the link between CBA and Kaldor-Hicks efficiency, although tighter, does not justify CBA, because Kaldor-Hicks itself lacks normative significance”); see also KYSAR, supra note 61, at 102–04 (discussing Pareto and Kaldor-Hicks optimality). A distinct limitation on the capacity of cost-benefit analysis to generate efficiency outcomes is highlighted by Claire Hill. See Claire A. Hill, Beyond Mistakes: The Next Wave of Behavioural Law and Economics, 29 QUEEN'S L.J. 563, 582–83 (2004) (noting that “[w]here the law requires a cost-benefit analysis, there is an implicit assumption that the options whose costs and benefits are to be compared are known, or at least determinable through some mechanical and uncontroversial procedure”).
this account, cost-benefit analysis "produces the most desirable results from the least resources."\textsuperscript{122}

In light of the necessarily speculative elements of cost-benefit analysis in actual practice, as well as its susceptibility to manipulation,\textsuperscript{123} however, more modest accounts of how cost-benefit analysis might promote optimal outcomes should also be considered. Cost-benefit analysis might, for example, be argued to increase the prospect that agencies will make \textit{relatively} better choices among alternative regulatory policies—even if not necessarily leading them to the optimally efficient ones.\textsuperscript{124} Even more modestly, cost-benefit analysis might primarily function in the negative, to eliminate affirmatively bad options.\textsuperscript{125} Applying an exceedance test of efficiency, we might expect cost-benefit analysis to reveal that subset of regulatory initiatives as to which costs \textit{outweigh} benefits.\textsuperscript{126} Such inefficient regulation, in turn, might be less likely to become law.\textsuperscript{127}

Finally, cost-benefit analysis might be argued to promote optimal outcomes by encouraging the pursuit of efficiency versus distributive

\textsuperscript{122} Julie G. Yap, \textit{Just Keep Swimming: Guiding Environmental Stewardship Out of the Riptide of National Security}, 73 \textit{Fordham L. Rev.} 1289, 1322 (2004) (internal quotation marks omitted); see also Revesz \& Livermore, \textit{supra} note 33, at 174–75 (describing the function of cost-benefit analysis in "calibrat[ing] the stringency of agency regulation"); Johnston, \textit{supra} note 15, at 1347–48 (advocates of cost-benefit analysis "assume that . . . regulations would be ‘better,’ because agencies would have taken a better and more detailed account of the real economic costs of regulatory compliance"). A related, but different, contribution of cost-benefit analysis might be its ability to suggest lower-cost means to achieve identical ends. See Cass R. Sunstein, \textit{Cost-Benefit Default Principles}, 99 \textit{Mich. L. Rev.} 1651, 1661 (2001) (providing examples where cost-benefit analysis has "led to regulations that accomplish statutory goals at lower cost").

\textsuperscript{123} See William W. Buzbee, \textit{Regulatory Reform or Statutory Muddle: The “Legislative Mirage” of Single Statute Regulatory Reform}, 5 \textit{N.Y.U. Envtl. L.J.} 298, 301 (1996) (observing that "the nature of cost-benefit analysis itself . . . provide[s] agencies and regulated entities heightened opportunity to manipulate the rulemaking process").

\textsuperscript{124} See Steve P. Calandrillo, \textit{Responsible Regulation: A Sensible Cost-Benefit, Risk Versus Risk Approach to Federal Health and Safety Regulation}, 81 B.U. L. Rev. 957, 1032 (2001) (noting that cost-benefit analysis is a "useful tool[ ] in identifying policies that maximize societal well-being more often or better than alternative procedures").

\textsuperscript{125} See, \textit{e.g.}, Sunstein, \textit{supra} note 64, at 1074 (stating that "[a]t the very least, cost-benefit analysis" can show "people that the consequences of various approaches might be different from what they seem").

\textsuperscript{126} See Driesen, \textit{supra} note 120, at 387–90 (describing the "No Excess Cost" conception of efficiency).

\textsuperscript{127} See Alexander Volokh, \textit{Rationality or Rationalism? The Positive and Normative Flaws of Cost-Benefit Analysis}, 48 \textit{Hous. L. Rev.} 79, 93 (2011) (describing "cost-benefit analysis as a mechanism that . . . puts a thumb on the scale in the direction of restoring the efficient amount of regulation"); see also Johnston, \textit{supra} note 15, at 1347 (suggesting that requiring agencies to engage in cost-benefit analysis of proposed rules would result in fewer regulations being promulgated); Yap, \textit{supra} note 122, at 1323 (cost-benefit analysis encourages the adoption of regulations only in those cases "when benefits exceed costs" (internal quotation marks omitted)).
goals in administrative regulation. Cost-benefit analysis, in this account, may help to isolate the efficiency versus distributive effects of different regulatory choices.\textsuperscript{128} In turn, agencies can be pressed to extract asserted distributional benefits, limiting regulatory initiative to the promotion of true efficiency ends.\textsuperscript{129}

2. Reducing Cognitive Biases

Beyond better outcomes, cost-benefit analysis might also be understood to promote "efficiency" by reducing cognitive biases. As Cass Sunstein has described, such biases can readily be identified in public assessments of regulatory choices, and in those of regulators as well.\textsuperscript{130} The paradigmatic case is cancer—as to which public perceptions of risk are grossly exaggerated by comparison with other, far more substantial risks.\textsuperscript{131} The perceived costs of preventing cancer are similarly skewed, but in the opposite direction.\textsuperscript{132} In certain settings,

\begin{flushright}
\textsuperscript{128} See Johnston, supra note 15, at 1347 (highlighting distributional versus efficiency ends of regulation). One might plausibly see such a preference for efficiency versus distributive ends as inherent to the methodology of cost-benefit analysis. See Douglas A. Kysar, Politics by Other Means: A Comment on "Retaking Rationality Two Years Later," 48 Hous. L. Rev. 43, 75-76 (2011) (discussing the importance of choosing a value metric in cost-benefit analysis).

\textsuperscript{129} See Livermore, supra note 64, at 176 (noting distributional elements of regulatory analysis). One might see the requirement of Office of Management and Budget review of agencies' cost-benefit analyses as a means to effectuate such a commitment to true efficiency ends.

\textsuperscript{130} See Sunstein, supra note 64 (discussing cognitive biases and arguing that cost-benefit analysis is justified by its ability to counteract those biases); see also Darryl K. Brown, Cost-Benefit Analysis in Criminal Law, 92 Cal. L. Rev. 323, 341 (2004) ("CBA can help counter several well-established cognitive biases."); Robert W. Hahn & Cass R. Sunstein, A New Executive Order for Improving Federal Regulation? Deeper and Wider Cost-Benefit Analysis, 150 U. Pa. L. Rev. 1489, 1502 (2002) (arguing that cost-benefit analysis can overcome cognitive limitations and correct misperceptions people have about the magnitude of risks); Mark Seidenfeld, Cognitive Loafing, Social Conformity, and Judicial Review of Agency Rulemaking, 87 Cornell L. Rev. 486, 492 (2002) (noting that "decisionmakers make cognitive errors that lead to systematic . . . biases"). In a sense, this account of the efficiencies of cost-benefit analysis can be understood as one means by which it fosters optimal outcomes. If we define such outcomes by the accurate reflection of relevant rational actors' preferences, then the reduction of cognitive biases can be understood to move us closer to that goal.

\textsuperscript{131} See McGarity, supra note 63, at 2369 (discussing "the intuitive toxicology through which the American public addresses health risks"); Sunstein, supra note 52, at 2266 (discussing how heuristics can lead people to miscalculate the probabilities of certain risks). The other classic example is the perception of flying as more risky than driving. See Lyrissa Barnett Lidsky, Nobody's Fools: The Rational Audience as First Amendment Ideal, 2010 U. Ill. L. Rev. 799, 831 (stating that this perception can be explained by the availability heuristic); Betty Joan Thurber, A Behavioral Science Analysis of Sarbanes-Oxley's Certification Requirements—The Right Kind of Deterrence?, 7 Transac. Tenn. J. Bus. L. 123, 134-35 (2005) (suggesting that it can be explained by the vividness bias).

then, cost-benefit analysis may "help [the] government resist demands for regulation that are rooted in misperceptions of facts." Cost-benefit analysis can thus respond to "intense emotional reactions" with information relevant to the perceived risk.

Although a number of cognitive biases may be impacted by cost-benefit analysis, certain biases stand out. Attitudes about cancer and the risk of a plane crash, for example, may arise from alarmist bias and resulting concentration on the severity of the potential harm, without regard to its (limited) probability. Availability heuristics may also be relevant in those settings, with increased risk estimates associated with prominent incidents of the negative result. This is precisely the dynamic, of course, in risk assessments of flying versus driving.

A related dynamic is the tendency to give greater weight to clearly visible benefits or costs (i.e., those "on-screen") versus those that are less apparent (i.e., "off-screen"). Connected to the latter are systemic effect biases, which cause individuals to discount the effects that a decision will have within a complex system. Finally, informational and reputational cascades may cause individuals to accept certain beliefs simply because they think others hold them. In relevant cases, this may generate panic about risks that are, in reality, quite small.

The impact of these cognitive biases reaches beyond the general public, affecting the conduct of agencies as well. Availability bias

(noting Posner's argument that "people generally have a tendency to overestimate the benefits and underestimate the costs associated with science and technology").

133 Sunstein, supra note 122, at 1662.
134 Id.
135 See Sunstein, supra note 64, at 1070–71 (discussing contemporaneous research on the subject and its implications for cost-benefit analysis).
136 See id. at 1065 (explaining the availability heuristic in the context of cost-benefit analysis).
137 See supra note 131 and accompanying text.
138 Brown, supra note 130, at 342.
139 See Sunstein, supra note 64, at 1069 (highlighting difficulty of identifying and accounting for systemic costs when planning regulations); see also Brown, supra note 130, at 342 ("[P]eople often cannot foresee complex, systemic effects of particular interventions. It is hard to anticipate unintended consequences, though they are common in complex systems regulated by social policy.").
140 Sunstein, supra note 64, at 1066–67.
may arise, for example, out of an agency’s primary experience in a particular industry or field. On-screen/off-screen heuristics may also be strong, perhaps especially in those agencies with the very narrowest mandates. More generally, agencies may fail to realize their actions are based on distorted public perceptions.

Where an agency must grapple with cognitive biases, then, cost-benefit analysis may help to “raise the consciousness of upper level decisionmakers to all of the impacts of their decisions, thereby reducing the tendency of mission-oriented agencies to reach irrational results.”

3. Priority Setting

The role of cost-benefit analysis in agency priority setting represents a final way in which it may enhance efficiency. Cost-benefit analysis is generally understood as part of the machinery that helps to produce rational decisionmaking. But rational decisionmaking is not achievable in the absence of a presupposition that relevant decisionmakers are capable of accurately and systematically processing relevant information. Such a presupposition is necessary both in order to understand how the information available to decisionmakers is likely to be used and in order to assess the likelihood of and potential for accurate decisionmaking. The role of cost-benefit analysis in agency priority setting represents a final way in which it may enhance efficiency. Cost-benefit analysis is generally understood as a rational means of evaluating options and programs; it is used to make decisions that are likely to be consistent with efficiency requirements.

Cost-benefit analysis is typically used in the public sector to evaluate the costs and benefits of proposed policies or programs. It is often used to determine whether a policy or program is efficient, meaning that it produces the maximum benefits for a given level of costs or the minimum costs for a given level of benefits. Cost-benefit analysis is used in a variety of contexts, including resource allocation, policy evaluation, and regulatory decision-making.

Cost-benefit analysis is based on the idea that decisionmakers should take into account the costs and benefits of different options or programs when making decisions. The analysis involves estimating the costs and benefits of each option or program, and comparing them to determine which option or program is the most cost-effective. Cost-benefit analysis is typically used in the public sector to evaluate the costs and benefits of proposed policies or programs. It is often used to determine whether a policy or program is efficient, meaning that it produces the maximum benefits for a given level of costs or the minimum costs for a given level of benefits. Cost-benefit analysis is used in a variety of contexts, including resource allocation, policy evaluation, and regulatory decision-making.

While cost-benefit analysis is often used in the public sector, it is also used in the private sector to evaluate the costs and benefits of different options or programs. For example, a company may use cost-benefit analysis to determine whether to invest in a new technology or to continue using an existing technology. Similarly, a hospital may use cost-benefit analysis to determine whether to invest in new medical equipment or to continue using existing equipment.

Cost-benefit analysis is a useful tool for decisionmaking, but it is not a perfect one. There are several limitations to cost-benefit analysis, including:

- The cost-benefit analysis process can be time-consuming and expensive.
- The cost-benefit analysis process can be complex and difficult to understand.
- The cost-benefit analysis process can be biased towards certain outcomes.
- The cost-benefit analysis process can be influenced by political factors.

Despite these limitations, cost-benefit analysis remains an important tool for decisionmaking in both the public and private sectors.
analysis may help inform agency choices as to where (and when) to regulate. In particular, it may suggest useful areas for regulatory engagement that might otherwise be overlooked.

Most robustly, agency use of cost-benefit analysis within the framework of an annual regulatory inventory would help shape priorities across distinct regulatory domains. Even absent any such inventory, however, a consistent practice of analyzing the promised benefits of alternative regulatory choices might be expected to foster a certain comparative evaluation across regulatory spheres and thereby impact agency priorities.\footnote{144}

The use of cost-benefit analysis in priority setting is closely tied to the pursuit of optimal outcomes and the minimization of cognitive biases. Priority setting is worth teasing out as a distinct function, however, given the possibility of a role for cost-benefit analysis in priority setting, even absent any cognitive bias. Such a function might likewise be useful, even if more optimal ends are not ultimately advanced.

But a further point also bears noting: Both conventional wisdom and actual practice—though not formal theory—most commonly treat cost-benefit analysis as \textit{constraining} of regulatory initiative,\footnote{145} with a "cost-benefit state" assumed to produce less regulation. This seems like the most natural consequence of the optimal-outcomes and cognitive-bias function accounts of efficiency gains described above.

By contrast, any function of cost-benefit analysis in setting priorities involves some greater degree of balance. Thus, in facilitating priority setting, cost-benefit analysis could well \textit{increase} the volume of advocacy of priority setting as an important function of cost-benefit analysis appears to be motivated by something other than true priority setting. \textit{See} David M. Driesen, \textit{Getting Our Priorities Straight: One Strand of the Regulatory Reform Debate}, 31 \textit{ENVT L. REP.} 10,003 (2001). Rather than being about "ordering" or even "selection," Driesen argues, priority setting arguments for cost-benefit analysis by Breyer, Sunstein, and others are primarily directed to distinct questions of "allocation." \textit{Id.} at 10,010–14. As Driesen himself acknowledges, however, cost-benefit analysis \textit{could} be imagined to serve a true priority setting function, even if it is not commonly promoted—let alone used—in that fashion. \textit{Id.} at 10,018.

\footnote{144} It bears acknowledging that priority setting might alternatively be cast as a non-efficiency (rather than efficiency) function of cost-benefit analysis. Thus, cost-benefit analysis could facilitate setting priorities in accordance with something other than efficiency criteria. As commonly understood (most particularly by advocates of cost-benefit analysis), however, the priority setting impact of cost-benefit analysis is an efficiency function. \textit{See} Sunstein, \textit{supra} note 64, at 1063 (commenting on administrative misallocations and the role of cost-benefit analysis in potentially curing them).

\footnote{145} \textit{See} Driesen, \textit{supra} note 120, at 354–64 (noting only one case in which cost-benefit analysis might be argued to have increased regulatory stringency, after analyzing a set of cases asserted to demonstrate the potential for cost-benefit analysis to increase regulation).
rulemaking in certain settings—once it has focused regulators' attention on priority needs.\textsuperscript{146}

Broadly, this potential impact arises where cost-benefit analysis drives regulators to focus on those areas where "intervention will yield the greatest net benefits."\textsuperscript{147} At a minimum, cost-benefit analysis may \textit{reduce} attention to areas in which intervention would accomplish little, freeing up resources in other spheres.\textsuperscript{148} More dramatically, it might help to overcome apathy or indifference about an issue-area or topic—whether on the part of the relevant regulatory agency or among the public generally—thereby encouraging regulatory activity.\textsuperscript{149}

\section*{B. Nonefficiency Functions of Cost-Benefit Analysis}

An understanding of the role of cost-benefit analysis in distinct settings—be it financial regulation, environmental regulation, or elsewhere—requires not only parsing generalized efficiency claims into distinct efficiency functions, but also recognizing various arguments for cost-benefit analysis that are not grounded in any promise of efficiency. Less commonly acknowledged, let alone explored, these may be important aspects of the goal of cost-benefit analysis in any given case—including, I will argue below, in the present one.

\subsection*{1. Limited Regulation}

Any comprehensive account of the functions of cost-benefit analysis must include the generalized constraint of regulatory initiative. At least in some cases, "[c]ost-benefit analysis serves a political function not just of clarifying agency action but restraining agency

\begin{footnotesize}
\begin{enumerate}
\item As Sunstein notes, cost-benefit analysis may "promote attention to problems that, while serious, are not producing much public attention." Sunstein, \textit{supra} note 121, at 303. \textit{But see} Kysar, \textit{supra} note 128, at 69–70 (noting the usual role of cost-benefit analysis in limiting regulatory initiative). In absorbing agency resources, of course, even the use of cost-benefit analysis for priority setting must place some greater burden on regulatory initiative. Driesen, \textit{supra} note 143, at 10,019.
\item Yap, \textit{supra} note 122, at 1323.
\item Sunstein, \textit{supra} note 122, at 1661.
\item Hahn \& Sunstein, \textit{supra} note 130, at 1502. A related possibility is that cost-benefit analysis might be used to help justify proposed regulatory undertakings. See Michael A. Livermore \& Richard L. Revesz, Retaking Rationality \textit{Two Years Later}, 48 Hous. L. REV. 1, 28 (2011) (noting the Obama administration's use of this approach). Cost-benefit analysis might fruitfully be integrated, for example, into an agency's concise statement of basis and purpose. \textit{Cf.} Kevin M. Stack, \textit{Interpreting Regulations}, 111 Mich. L. REV. 355, 397 (2012) (mentioning cost-benefit analysis as part of a larger discussion of a purposivist approach to interpreting regulations and the role of rationality in that method).
\end{enumerate}
\end{footnotesize}
action, pulling it rightward.”150 Hence the pithy critique of it as generating “paralysis by analysis.”151

The expansion of cost-benefit analysis through one of President Ronald Reagan’s very first executive orders hints at this deregulatory purpose.152 Likewise, efforts of the Republican-controlled Congress elected in 1994 to expand its use.153 As Pablo Spiller and Emerson Tiller describe, the Republican majority saw cost-benefit analysis as a way of increasing agencies’ decision costs (reducing the volume of new rules), while also decreasing the decision costs of courts reviewing (and presumptively limiting) agency rulemaking.154 Whatever the particular mechanism, though, some element of regulatory constraint must be included among the possible functions of cost-benefit analysis.155

2. The Enhancement of Overall Well-Being

The use of cost-benefit analysis to advance efficiency is problematic in important respects. At least in some circumstances, pursuit of the collective utility preferences of relevant individuals—of efficiency—may not be an attractive regulatory objective. “If social welfare has an objective or idealized component, so that people may be misinformed about their own preferences or that their preferences often should not count (sadistic preferences, for example), then cost-benefit analysis will produce wrong results when these distorted preferences have substantial influence.”156 Consequently, where preferences are disinterested, uninformed, adaptive, or simply bad, cost-benefit analysis directed to efficiency may be ill-advised.157

150 Eric A. Posner, Cost-Benefit Analysis as a Solution to a Principal-Agent Problem, 53 Admin. L. Rev. 289, 296 (2001); cf. Volokh, supra note 127, at 79, 80 (“Free-market advocates have mostly gone along with cost-benefit analysis because of a belief that it would serve as a brake on regulation.”).

151 McGarity, supra note 121, at 50.

152 See supra notes 39–41 and accompanying text.

153 See supra note 72 and accompanying text.


155 In actual practice, the antiregulatory valence of cost-benefit analysis is even clearer. See Revesz & Livermore, supra note 33, at 24–42 (tracing the political history of cost-benefit analysis, starting with the Reagan administration); Driesen, supra note 120, at 354–84 (reviewing history of cost-benefit analysis, both generally and under the administration of President George W. Bush).

156 Posner, supra note 150, at 292.

157 See Adler & Posner, supra note 121 (arguing that cost-benefit analysis is best understood as a welfarist tool).
same may be true where significant wealth differentials are associated with the gains (or losses) from a given regulatory initiative.\textsuperscript{158}

If the operative measure of costs and benefits is not the satisfaction of any and all preferences, however, but only the positively well-founded and normatively attractive subset of them, cost-benefit analysis might still serve to enhance overall well-being—even if it does not promote efficiency.\textsuperscript{159} Cost-benefit analysis—at least as effectively designed and selectively applied—may thus serve as a sufficiently close proxy for well-being to warrant its use as a decision tool.\textsuperscript{160}

More generally, cost-benefit analysis may advance a broader set of welfarist goals, including nonutilitarian conceptions of moral and political good.\textsuperscript{161} For present purposes, however, it is enough to say that cost-benefit analysis may—at least sometimes—help to enhance overall well-being, regardless of its implications for efficiency.\textsuperscript{162}

\textsuperscript{158} See Adler & Posner, supra note 36, at 238 (suggesting that wealth differences among those that gain from a project and those who lose may be a determinative factor in whether an agency should employ cost-benefit analysis). Stating the point differently, it is not clear that cost-benefit analysis can be expected to consistently promote Pareto efficiency. Adler & Posner, supra note 36, at 189. Kaldor-Hicks efficiency, meanwhile, cannot offer a normative basis for cost-benefit analysis, given its flawed assumptions of redistribution. See id. at 190–91 (outlining limitations of Kaldor-Hicks efficiency as a defense of cost-benefit analysis).

\textsuperscript{159} See Adler & Posner, supra note 121, at 1106 (rebutting critics of cost-benefit analysis by arguing that normative concerns, not efficiency, justify the approach). In this account, willingness to pay and willingness to accept cease to be the operative metrics of cost-benefit analysis. See David M. Driesen, Distributing the Costs of Environmental, Health, and Safety Protection: The Feasibility Principle, Cost-Benefit Analysis, and Regulatory Reform, 32 B.C. ENVTL. AFF. L. REV. 1, 61 (2005) (parsing and critiquing Adler and Posner’s approach).


\textsuperscript{161} See Adler & Posner, supra note 121. Adler and Posner’s argument to this effect is largely one of comparative institutional analysis. For them, cost-benefit analysis represents the best decision procedure to advance overall welfare compared to any available alternative. See id. at 1105 (emphasizing that cost-benefit analysis outperforms other available decision guides). In a related vein, Darryl Brown suggests a view of cost-benefit analysis as merely an informational tool, capable of serving an array of policy and welfare goals, well beyond efficiency. See Brown, supra note 130, at 336 (listing different questions as to which cost-benefit analysis can provide information).

\textsuperscript{162} Note that this account of the function of cost-benefit analysis relies on the possibility of interpersonal comparisons of utility among other deviations from the prevailing wisdom of neoclassical economics. Cf. Adler & Posner, supra note 36, at 204–09 (exploring ways to surmount objections to interpersonal welfare comparisons); Robert B. Ahdieh, Beyond
3. Increased Transparency

Cost-benefit analysis may also increase the transparency of regulatory decisionmaking in at least three respects. First, at the most basic level, cost-benefit analysis can serve a purely informational function. Going a step further, it can be understood as a mechanism of public accountability—and even political redress. Finally, to related effect, cost-benefit analysis may also impact the role of interest groups in the regulatory process.

By way of information access, to begin, cost-benefit analysis generates data regarding the basis of agencies’ decisionmaking—information that might otherwise be inaccessible to the public. As a result, it may better position those impacted by relevant regulatory initiatives to track agency decisionmaking.\textsuperscript{163} Even where cost-benefit analysis is not a mandatory constraint on agency action, then, but involves mere “consideration” of a set of enumerated factors—as in Section 106—it may be useful.\textsuperscript{164}

Greater access to information may minimally help to call attention to the issues at stake in a given regulatory sphere.\textsuperscript{165} Beyond that, it may foster a more informed public dialogue around relevant regulatory choices.\textsuperscript{166} “[C]ost-benefit analysis should increase the likelihood that citizens generally, and officials in particular, will be informed of what is actually at stake.”\textsuperscript{167} Of course, the quality of information generated by cost-benefit analysis—and hence any gain in transparency—has its limits. Given both the speculative quality of much quantification in cost-benefit analysis, as well as its resulting susceptibility to manipulation,\textsuperscript{168} cost-benefit analysis can hardly be said to generate perfect information.

Whatever its precise quality, access to the information that cost-benefit analysis generates may also facilitate public accountability.


\textsuperscript{163} \textit{See} Adler & Posner, \textit{supra} note 36, at 175 (noting that cost-benefit analysis fosters regulatory transparency).

\textsuperscript{164} \textit{See} Sunstein, \textit{supra} note 122, at 1704 (defining and examining “consideration”); \textit{see also} Johnston, \textit{supra} note 15, at 1352–53 (comparing procedural cost-benefit statutes to substantive cost-benefit mandates).

\textsuperscript{165} \textit{See} Sunstein, \textit{supra} note 121, at 303 (including this among benefits of cost-benefit analysis); \textit{see also} Rose \& Walker, \textit{supra} note 34, at 14 (expanding on the transparency justification for cost-benefit analysis and describing how it fosters more open, less distorted understanding of regulatory issues).

\textsuperscript{166} McGarity, \textit{supra} note 121, at 40.

\textsuperscript{167} Hahn \& Sunstein, \textit{supra} note 130, at 1503; \textit{see also} Sunstein, \textit{supra} note 72, at 293–94 (describing ways in which properly conceived cost-benefit analysis allows officials to better oversee regulatory agencies).

\textsuperscript{168} \textit{See supra} note 123.
Cost-benefit analysis may thus "make[,] it easier for voters to, if necessary, throw[ ] the bums out."\(^{169}\) In the extreme case, this could reach even bums at the agency level. More naturally, though, it increases accountability of the elected officials whom the public expects to police agency action.\(^{170}\)

Of course, the claim that cost-benefit analysis increases accountability also has its limits. At least as currently overseen by the Office of Management and Budget—and the Office of Information and Regulatory Affairs (OIRA) in particular—cost-benefit analysis also reduces transparency in important respects.\(^{171}\) The review process may generate substantive regulatory changes, without significant process, and with political rather than technocratic motivations as their source.\(^ {172}\) At least in some forms, however, cost-benefit analysis may enhance public accountability.

Finally, cost-benefit analysis and resulting transparency may reduce the influence of interest groups on administrative rulemaking.\(^{173}\) The objective, transparent, and (perhaps misleadingly) simple nature of cost-benefit analysis may reduce interest group influence by limiting the ability to distort public perceptions. More broadly, the capacity of interest groups to achieve desired results "by exaggerating risks [or] by minimizing them" necessarily diminishes

\(^{169}\) Volokh, supra note 127, at 92 (internal quotation marks omitted); see also Rose & Walker, supra note 34, at 13 (citing multiple benefits to public debate and accountability that flow from cost-benefit analysis).

\(^{170}\) In this account, cost-benefit analysis offers a readily understood basis to assess the political actors responsible for the appointment of agency heads. Posner, supra note 150, at 295.

\(^{171}\) See Nina A. Mendelson, Disclosing "Political" Oversight of Agency Decision Making, 108 Mich. L. Rev. 1127 (2010) (suggesting a lack of transparency in presidential oversight of regulatory agencies via the Office of Management and Budget); see also Frank Ackerman & Lisa Heinzerling, Pricing the Priceless: Cost-Benefit Analysis of Environmental Protection, 150 U. Pa. L. Rev. 1553, 1576-78 (2002) (citing the EPA's arsenic decisions to highlight the limited transparency of cost-benefit analysis); Driesen, supra note 159, at 78-80 (cataloging ways in which cost-benefit analysis might inhibit, or only indirectly aid, transparency, compared to other models); Kysar, supra note 128, at 68 (stating that the complex, technical nature of cost-benefit analysis reduces transparency, allowing agencies to disguise value choices).


\(^{173}\) See Rose & Walker, supra note 34, at 14–15 (arguing that cost-benefit analysis "provides a significant check" on interest group influence, by "requiring the agency to reveal the factors that underlie its analysis"); Michael A. Livermore & Richard L. Revesz, Regulatory Review, Capture, and Agency Inaction, 101 Geo. L.J. 1337, 1370–73 (2013) (suggesting capacity of cost-benefit analysis to expand the universe of interests represented in rulemaking).
where the risks are more neutrally evaluated and reported. This suggests, finally, the possibility that cost-benefit analysis might be understood to constrain interest-group influence by addressing the public's cognitive biases—on which interest groups might otherwise play.

Modeling the impact of cost-benefit analysis on interest-group influence, Eric Posner begins with a dynamic in which interest groups utilize informational advantages about the status quo to bias the decisionmaking of the President or Congress. Once cost-benefit analysis is introduced, however, interest groups' private information about the implications of a proposed regulatory initiative is largely revealed, undermining their influence over the President and Congress, and hence the agency. This is not to say, of course, that such influence is nullified by cost-benefit analysis. But the particular element of it arising from interest groups' superior information may be diminished.

4. *Agency Monitoring*

Following directly from the foregoing, cost-benefit analysis may be an important tool not only in facilitating public awareness and action, but also in facilitating more effective monitoring of agencies by the political branches. At some level, this might be linked back to the role of cost-benefit analysis in priority setting. Cost-benefit analysis may thus help to ensure that agencies are pursuing the priorities of the political authorities to whom they are accountable, rather than their own.

Posner's aforementioned model thus frames the interaction between the political branches and the agencies they oversee as a principal-agent relationship. Within this framework, the political principal's capacity to effectively evaluate any given regulatory initiative turns on its ability to overcome significant information

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174 Hahn & Sunstein, *supra* note 130, at 1502–03.
175 Sunstein, *supra* note 122, at 1662.
177 *Id.* at 1174–75. To be sure, the aforementioned risk that cost-benefit analysis may increase the opportunities for manipulation of regulatory decisionmaking by special interests is a substantial one. See Driesen, *supra* note 159, at 83–85 (rejecting arguments that cost-benefit analysis limits the scope for interest-group manipulation). If the history of cost-benefit analysis is any indication, the latter may be the primary valence of the impact of cost-benefit analysis on interest-group influence—and especially industry influence. See *supra* note 155 and accompanying text. For present purposes, however, it is enough to say that cost-benefit analysis may sometimes function to limit the impact of special interests.
178 Posner, *supra* note 40, at 1142–43; *see also* Posner, *supra* note 64, at 289–92 (discussing the moral hazard problem created by the principal-agent relationship between the President and agencies).
asymmetries between it and the agency. The agency is thus more aware of the status quo—information that may be valuable to the President or Congress in determining whether a given initiative effectively advances its political preferences. By making such information available, cost-benefit analysis allows the political principal to better determine whether to intervene and prevent the proposed undertaking from going forward.\textsuperscript{179}

Importantly, in this account, one need not assume any form of efficiency as the normative end sought by the President or Congress.\textsuperscript{180} Further, there is no need for cost-benefit analysis to take the form of a substantive constraint on agency action. Rather, it suffices that agencies are required to conduct a cost-benefit analysis, even if they need not comply with it.\textsuperscript{181}

Cost-benefit analysis may also produce a degree of agency self-alignment with political expectations, independent of any increase in monitoring or discipline.\textsuperscript{182} As agencies engage in cost-benefit analysis, they may become more attuned to relevant political constraints, and proceed accordingly. Cost-benefit analysis may thus foster a certain balancing of political factors by agencies as well.

5. Factors for Decision

Finally, cost-benefit analysis might be understood as a device to force agencies to consider factors that Congress has deemed relevant. This, of course, is required for any statutory delegation, whether in the organic statute of an agency or in other statutes it is charged to administer.\textsuperscript{183} The Energy Policy and Conservation Act, for example,

\textsuperscript{179} Adler and Posner also offer a slightly modified version of this claim. In addition to fostering agency accountability to their political principals, cost-benefit analysis may also provide an affirmative tool by which administrative agencies can better justify their decisions to other agencies. Adler \& Posner, \textit{supra} note 36, at 175.

\textsuperscript{180} \textit{See} Posner, \textit{supra} note 40, at 1162 (pointing out that the constraining effects of cost-benefit analysis on agency action can help even those principals whose regulatory goals are not defined by efficiency). More effective monitoring of agency action by the President or Congress may advance democratic accountability, however, even if the agency's preferences are relatively more aligned with efficiency than those of its political principals.\textsuperscript{180}

\textsuperscript{181} \textit{See id.} at 1191 (suggesting that agencies might be permitted to issue inefficient regulations, so long as they conduct cost-benefit analyses).

\textsuperscript{182} \textit{See} Sunstein, \textit{supra} note 72, at 288–89 (suggesting that cost-benefit analysis in conjunction with the threat of congressional review of agency action can deter agencies from proposing poor regulations in the first place).

charges NHTSA to consider four factors in setting average fuel economy standards: technological feasibility, economic practicability, the effect of other motor vehicle standards on fuel economy, and the national need to conserve energy.\textsuperscript{184} The EPA, meanwhile, must consider nine factors in granting a permit for the dumping of waste into ocean waters, including the need for the proposed dumping; its effect on human health and welfare, including economic, aesthetic, and recreational values; and potential alternatives.\textsuperscript{185}

One might imagine cases, however, in which the enumerated factors for consideration are not substantive ones that speak to the mission of the relevant agency, let alone the particulars of a given statutory charge. Rather, they are variables of cost, efficiency, or the like, which Congress otherwise fears might be neglected. In such circumstances, cost-benefit analysis may serve as a tool by which Congress can press the agency to consider a new variable—or set of variables—in its decisionmaking.

Lawmakers might find particular merit in this approach, where it would be difficult for Congress to reach a consensus to alter existing—perhaps even longstanding—criteria for decisionmaking. This might be true in any number of circumstances. A particularly striking one, however, would be where the new factors to be added to the analysis could be seen to tilt against the initiation of new regulatory undertakings. In that setting, cost-benefit analysis may serve to indirectly integrate the desired considerations.

Contrary to the loosely theorized invocation of efficiency as the singular purpose of cost-benefit analysis, then, it may serve a wide range of potential functions. Depending on the particular statutory provision at issue—and perhaps the particular application of it—cost-benefit analysis may serve a variety of efficiency or nonefficiency purposes of varying scope. In assessing any given cost-benefit mandate, as a result, an essential first step must be to identify its essential function or functions.

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III

THE FORM(S) OF COST-BENEFIT ANALYSIS

Having outlined a broader range of functions for cost-benefit analysis than has commonly been evaluated, the next step in understanding cost-benefit analysis under Section 106 (or any other statutory mandate) is to identify the key determinants of the form that such analysis should take in a given case.186 As with the focus on efficiency as its singular function, cost-benefit analysis is commonly seen as fairly singular in form. In reality, though, cost-benefit analysis is both more ad hoc and more systematically varied than conventional accounts of its application would suggest.

Much of the conception of cost-benefit analysis as a singular phenomenon can be traced to its most common application in the arenas of human health and safety, environmental regulation, and risk regulation generally. The first requirement of cost-benefit analysis in U.S. law came in the Flood Control Act of 1936.187 The expansion of cost-benefit analysis mandates—in the National Environmental Policy Act, the Water Pollution Control Act, and the Toxic Substance Control Act, among others—likewise occurred largely in these areas.188 Given its commonplace application to this particular set of questions, it is hardly surprising that cost-benefit analysis would be viewed as a fairly standardized tool of decisionmaking.189 As it is applied more broadly, however—whether in financial regulation or elsewhere—our conception of the practice must necessarily change. Distinct forms of cost-benefit analysis will need to be recognized, along with the possibility that the practice may be inapplicable to certain settings.

To be sure, some have acknowledged the need for distinct applications of cost-benefit analysis in distinct settings. Jason Johnston, for example, has noted the relevance of whether cost-benefit analysis is

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186 Such a framework is especially appropriate if we conceptualize cost-benefit analysis as a decision procedure to be measured against alternative decisionmaking approaches. See Adler & Posner, supra note 36, at 167 (arguing that cost-benefit analysis should be evaluated not by considering the moral justifiability of outcomes but by assessing its total costs, compared to other decision procedures).

187 See supra note 36 and accompanying text (outlining this early history of cost-benefit analysis).


189 To related effect, Adler suggests that cost-benefit analysis in risk regulation is different—though in the distinct sense that it may be less appropriate there. See Adler, supra note 64, at 273 (suggesting that for risk regulation, the assessment of costs and benefits and of overall well-being may be so divergent that cost-benefit analysis is inappropriate). Death (or the risk thereof) is different, he posits, given the difficulty of its monetization. Id. at 272.
mandated by statute in determining how it should be applied. Eric Posner, meanwhile, has encouraged variation in the form of cost-benefit analysis, depending on the extent of congruence between the preferences of the political principal and the relevant administrative agency. More modestly, the unsuitability of cost-benefit analysis in certain settings has also been acknowledged. Adler and Posner thus recognize that “under certain conditions agencies may need to modify the traditional understanding of CBA, or even depart from CBA entirely.”

An ecumenical notion of the form of cost-benefit analysis in diverse settings is less common, however, than one might expect. More importantly, there has been little attempt to sort out the factors to consider in determining how (or even whether) to apply cost-benefit analysis in a given setting. In this section, I suggest four factors to weigh in conducting that calculus: the legal basis for any cost-benefit analysis, the character of the responsible agency, the nature of the problem presented, and the variables to be weighed.

A. Source of Law

The form of cost-benefit analysis in a given setting will depend on the legal basis for that analysis. This begins with the question of whether the analysis is required, is merely authorized, or is entirely voluntary. As to the first two possibilities, consider the distinct provisions of the Consumer Product Safety Act and the Toxic Substances Control Act. While the former bars the Consumer Product Safety Commission from promulgating a new rule “unless it has prepared...
a final regulatory analysis of the rule containing . . . [a] description of the potential benefits and potential costs of the rule,"$^{196}$ the latter simply includes costs and benefits among multiple factors for the EPA to consider in its rulemaking.$^{197}$ As to the purely voluntary practice of cost-benefit analysis, meanwhile, the SEC's use of cost-benefit analysis—as distinct from its consideration of efficiency, competition, and capital formation—is a case in point.$^{198}$ Notwithstanding the absence of any formal requirement or even authorization, the SEC has engaged in cost-benefit analysis of its proposed rules since the 1970s.$^{199}$ Even such voluntary conduct of cost-benefit analysis may be grounds for critique, and even review, to the same degree as would any other grounds of agency decisionmaking. Yet expectations of form presumably ought to be less demanding where the agency's use of cost-benefit analysis is entirely voluntary.$^{200}$

A second question as to the source of law is whether any applicable call for cost-benefit analysis comes by way of statute or by executive order. Much of the administrative conduct of cost-benefit analysis arises from the series of executive orders that mandate it, dating back to President Reagan's Executive Order 12,291.$^{201}$ But many statutes—from the UMRA to the SDWA, Consumer Product Safety Act, and Accountable Pipeline Safety and Partnership Act—also charge individual agencies, or agencies generally, to engage in


$^{198}$ The D.C. Circuit has held that agencies are permitted to consider costs absent clear congressional intent to preclude such consideration. Michigan v. EPA, 213 F.3d 663, 678 (D.C. Cir. 2000).


$^{200}$ A question for another day would be why agencies voluntarily undertake to conduct cost-benefit analysis. Is it to reduce the prospect of an adverse judgment in the courts? To inoculate themselves against the potential imposition of a cost-benefit mandate? To ingratiate themselves to the executive or legislative branch? Whatever the motivation, it bears noting that voluntary undertakings of cost-benefit analysis tend to be less comprehensive than those mandated by executive order. See generally Arthur Fraas & Randall Lutter, On the Economic Analysis of Regulations at Independent Regulatory Commissions, 63 ADMIN. L. REV. 213 (2011) (reviewing economic analyses conducted by independent regulatory commissions, which historically have not been required to do so, and finding that their studies tend to be less precise and complete than those conducted by agencies subject to centralized regulatory review).

$^{201}$ See supra notes 39–44 and accompanying text (discussing the series of executive orders mandating cost-benefit analysis).
cost-benefit analysis. The form of any such analysis might be expected to vary depending on its source.

Minimally, our presumptions of justiciability versus non-justiciability might vary between statutory and nonstatutory cost-benefit analysis mandates. More substantively, cost-benefit analysis conducted pursuant to executive order might fairly be conceived as directed to a distinct audience. Even further, we might count it to serve distinct purposes—with attendant implications for form.

Finally, whether the charge to engage in cost-benefit analysis comes by statute or by executive order, one might separately consider whether such provision is directed to a specific agency or is of more general application. The UMRA and Executive Order 12,291, for example, are applicable generally. The Consumer Product Safety Act and SDWA, by contrast, are directed specifically to the Consumer Product Safety Commission and the EPA, respectively. Likewise for Section 106 of NSMIA, which speaks only to the SEC.

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205 See National Securities Markets Improvement Act of 1996 § 106, 15 U.S.C. § 77b (2012) (mandating consideration of efficiency, competition, and capital formation in SEC rulemaking). A related question might be whether any rulemaking at issue has been explicitly mandated or authorized by statute. In the case of the SEC's shareholder proxy access rule, thus, the Dodd-Frank Act specifically empowered the SEC to proceed. See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 971(b), 124 Stat. 1376, 1915 (2010) (codified as amended at 15 U.S.C. § 78n (2012)) (explicitly authorizing the SEC to issue rules to allow shareholders to use a security issuer's proxy solicitation materials). As such, one might plausibly expect that the conduct and review of any cost-benefit analysis should not be directed to whether to enact a rule but to the choice of rule. See Cox & Baucom, supra note 14, at 1836 (noting that Congress had already spoken to the policy issue of whether shareholder proxy access rules could be enacted, presumably removing that question from consideration during judicial review).
B. Responsible Agency

A second set of variables that might impact the form of cost-benefit analysis in a given setting concerns the nature of the agency of interest. Two features, in particular, may be relevant. The first is whether it is an independent agency. From the SEC to the Federal Election Commission, National Labor Relations Board, Federal Communications Commission, and others, independent agencies exist outside the executive branch and are commonly headed by multiple members, serving overlapping terms, who can only be removed for cause.\textsuperscript{206} As a consequence, they are expected to be relatively insulated from political demands.\textsuperscript{207} In the particular realm of cost-benefit analysis and centralized review by OIRA, for example, they face the same reporting obligations as executive agencies, but not the requirement of preclearance.\textsuperscript{208}

While such independence need not point to any wholesale variance in the applicable level of scrutiny or deference, the approach to cost-benefit analysis by an independent agency might be expected to differ in at least some ways. In the absence of clear statutory instruction to the contrary, to begin, one might more naturally assume a procedural rather than substantive obligation as to such analysis, with the agency required to consider (and perhaps report on) relevant costs and benefits, but not constrained in its decisionmaking by that analysis.\textsuperscript{209}

other hand, it may be important to distinguish the fact that the Dodd-Frank Act did not mandate rulemaking, but simply authorized it.

That Congress may not have seen Section 106 as a barrier to SEC rulemaking on proxy access, however, might be suggested by the precise language of its authorization. Specifically, Congress sanctioned SEC rulemaking “under such terms and conditions as the Commission determines are in the interests of shareholders and for the protection of investors.” Dodd-Frank Wall Street Reform and Consumer Protection Act \$ 971(b).


\textsuperscript{207} See \textit{id.} at 11,006 (characterizing independent agencies as “relatively insulated from partisan political pressures”). Justice Scalia addresses this characteristic of independent agencies in his plurality opinion in \textit{FCC v. Fox Television Stations, Inc.}, writing that independent agencies are “sheltered not from politics but from the President,” and that “their freedom from presidential oversight (and protection) has simply been replaced by increased subservience to congressional direction.” 556 U.S. 502, 523 (2009).

\textsuperscript{208} See Note, \textit{The Mysteries of the Congressional Review Act}, 122 \textit{HARV. L. REV.} 2162, 2181 n.120 (2009) (noting that, unlike executive agencies, independent agencies do not need to submit rules for preclearance to the Office of Management and Budget). Formal differences notwithstanding, however, the variance in accountability of independent versus executive agencies to the executive branch should not be exaggerated.

\textsuperscript{209} See Johnston, \textit{supra} note 15, at 1351-52 (contrasting substantive and procedural mandates for cost-benefit analysis). Independent agencies are not, of course, bound by most of the cost-benefit analysis requirements imposed on executive agencies. \textit{See
One might also favor a somewhat less demanding standard for cost-benefit analysis by independent agencies in light of their collegial structure, with multiple-member commissions or boards at their heads. That structure, in a sense, can be understood to serve at least some of the information-forcing and bias-reducing functions of cost-benefit analysis. In its presence, then, our expectations of cost-benefit analysis might be proportionally lower.

Other implications of independence for the conduct of cost-benefit analysis are more ambiguous. For example, one might be more inclined to judicial (rather than political) review of an independent agency’s cost-benefit analysis given the particular desire to insulate such agencies from political pressures. On the other hand, for the very same reason, one might argue against judicial review, if it were perceived as the more forceful constraint in actual practice. Similar ambiguity arises from the fact that independent agencies tend to be relatively smaller, more focused institutions than executive agencies. While specialization might favor an expectation of more sophisticated cost-benefit analysis, independent agencies’ size might cut in the opposite direction, at least when it comes to the frequency of analysis.

Beyond its independence, a second feature of the agency of interest might be whether it works in the realm of risk regulation.

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Current Guidance, supra note 69, at 4 n.12 (observing that independent agencies are merely encouraged to comply with the cost-benefit analysis mandates that are binding on executive agencies). Of course, this might counsel an expectation of closer compliance with any cost-benefit analysis requirements imposed by statute.

Cf. Kraus & Raso, supra note 14, at 35–36 (offering multimember agencies’ quasi-legislative character as a distinct rationale for more deferential review of their cost-benefit analyses).

This conclusion might depend on the aforementioned factor of whether the operative cost-benefit analysis provision is of general applicability or is directed to a particular agency. If Congress has charged a specific independent agency to engage in cost-benefit analysis—notwithstanding its collegial structure—one might arguably read that decision to demand even more stringent cost-benefit analysis. I am grateful to Jon Michaels for this insight.

But see infra note 379 and accompanying text (noting nonjusticiability of cost-benefit analysis in a number of important settings). On the contrast between political and judicial review, see Posner, supra note 40, at 1187–89 (highlighting differences between political versus judicial review as means to ensure agencies act in the interest of their principals).

Political control by way of the budget process, to be sure, should not be underestimated.

See infra notes 319–20 and accompanying text (contrasting the SEC, an independent agency, with executive agencies with vastly larger budgets and staffing).

Of course, any regulator can be cast as a risk regulator of some sort. A more precise inquiry might thus be whether the statutory responsibilities of the agency are directed to human, animal, or plant health or safety.

As to such agencies, one might plausibly argue for a less assertive form of cost-benefit analysis. As many have suggested, the valuation of life (and death) may present too many difficulties of calculation—indeed of any normative concerns—to undergird effective decisionmaking. At a minimum, one might favor a procedural versus substantive cost-benefit analysis by risk regulators.

On the other hand, risk regulation is the realm in which cost-benefit analysis has been most actively used (and studied), such that its application might be most predictable and reliable in that setting. Risk regulators thus benefit from far more robust models against which to test alternative regulatory choices. Cost-benefit analysis may be an especially important tool for risk regulators, meanwhile, depending on its function in the relevant case. Cognitive biases, for example, may be at their worst when it comes to questions of life and death.

C. The Nature of the Problem Presented

The relative complexity of the social or economic challenge at issue might also impact the form and rigor of any cost-benefit analysis used to address it. At one level, cost-benefit analysis might be seen to be increasingly justified as the complexity of the underlying problem.

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216 Cf. Adler, supra note 64, at 273 (proposing that cost-benefit analysis may not be appropriate for agencies regulating risks).

217 See Ackerman & Heinzerling, supra note 61, at 8–9 (arguing that cost-benefit analysis is flawed in part because it is impossible to place a meaningful price on human life).

218 See Johnston, supra note 15, at 1351–52 (comparing statutes requiring substantive cost-benefit analysis with those that only require procedural cost-benefit analysis).

219 See Revesz & Livermore, supra note 33, at 24–42 (chronicling the use of cost-benefit analysis from President Ronald Reagan through President George W. Bush).

220 See Kraus & Raso, supra note 14, at 29 (noting that agencies subject to Executive Order 12,866 have substantial experience and methodological analysis to draw upon when conducting cost-benefit analysis). Analogous models may be relatively difficult to develop in financial regulation, given the challenges of modeling both individuals' response to new information—among the primary contributions of securities regulation—and individuals' engagement in fraudulent behavior. See generally Copeland, supra note 32, at 96–97 (identifying factors, including the lack of data and experience regarding previously unregulated activity, that can make it difficult for the SEC to quantify certain regulatory costs and/or benefits).

221 See supra note 131 and accompanying text (noting the perceived high risks of cancer and of flying versus driving as paradigmatic examples of cognitive biases).
The challenge of ozone depletion may require systemic cost-benefit analysis more so than would an evaluation of glass recycling. It is in such settings that an effective decision tool is most crucial. By reducing complex decisions to tractable terms—both by eliminating seemingly irrelevant variables and by capturing the remaining variables using a common frame of reference—cost-benefit analysis may offer its greatest value when applied to complex problems.

On the other hand, the very exclusion and quantification of variables that makes cost-benefit analysis useful with complex problems may sometimes undermine its utility. This may be especially true where, as discussed below, complexity does not arise (at least primarily) from policy challenges associated with the key variables—how to coordinate private actors across multiple jurisdictions, for example—but from the presence of a large number of relevant variables. In the latter circumstance, the exclusion—or even de-emphasis—of certain variables may generate a more tractable, but also less accurate, evaluation. Cost-benefit analysis thus may solve one problem only by creating a new one. It is telling, in this regard, that no one has more forcefully argued for the inclusion of nonquantifiable variables in cost-benefit analysis than its advocates.

A second characteristic of the underlying problem that might impact the chosen form of cost-benefit analysis would be any distributional features of (a) the status quo, (b) any regulatory intervention directed at it, or (c) the cost-benefit analysis itself. Such distributional issues give rise to their own species of complexity, with resulting implications for the form (and suitability) of cost-benefit analysis.

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222 See Revesz & Livermore, supra note 32, at 14 (noting that cost-benefit analysis can be especially useful when engaging areas of uncertainty); cf. Livermore & Revesz, supra note 149, at 25 n.136 (considering the role of cost-benefit analysis in climate change regulation).

223 See infra notes 239-40 and accompanying text (discussing the difficulty of performing cost-benefit analysis when there are multiple variables to be considered on each side).

224 See infra notes 242-43 and accompanying text (noting that the multiplicity and/or intractability of relevant variables may make cost-benefit analysis less useful).

225 See David M. Driesen, Cost-Benefit Analysis and the Precautionary Principle: Can They Be Reconciled? 6 (2013) (unpublished manuscript) (on file with the New York University Law Review) (noting that purely quantitative cost-benefit analyses can be problematic, and that many cost-benefit analysis supporters argue that nonquantitative benefits should be considered as well).

226 See Matthew D. Adler, Well-Being and Fair Distribution: Beyond Cost-Benefit Analysis (2012) (proposing the “social welfare function” as the optimal policy-analysis methodology because, unlike cost-benefit analysis, it can incorporate distributive considerations); Arnold C. Harberger, On the Use of Distributional Weights in Social Cost-Benefit Analysis, 86 J. Pol. Econ. S87, S94-S102 (1978) (exploring distributional considerations in cost-benefit analysis); Noah M. Sachs, Rescuing the Strong
At some level, such distributional implications are universal. They vary in degree, however, with attendant variation in the implications for cost-benefit analysis.

Rigid cost-benefit analysis may be especially problematic, thus, in the presence of significant information asymmetries—and the distortions in preference functions that may follow.227 Where individuals lack relevant information, their preferences may not align with the maximization of their utility.228 As a result, a standard-form cost-benefit analysis, directed to utility maximization, will favor undesirable results.

A similar pattern may arise in the face of significant wealth differentials. Legitimate methodological concerns with the interpersonal comparison of utilities aside,229 there may be important differences in the marginal utility benefits associated with nominally comparable welfare gains across the wealth spectrum.230 In certain circumstances—the financial markets, among them—cost-benefit analysis will need to acknowledge and capture as much if it is to offer meaningful insight.

This is even more true where questions of distribution arise not from the ex ante equilibrium, but from the proposed regulatory intervention itself.231 A Kaldor-Hicks efficient intervention counseled by cost-benefit analysis is already problematic in its reliance on associated wealth transfers.232 The cost-benefit analysis is even more problematic where it fails to acknowledge the varying utility losses

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227 The same is true of any circumstance in which a subset of preferences is not effectively captured by the analysis. See Adler & Posner, supra note 36, at 168 (noting that cost-benefit analysis may need to be modified when a project would “affect people who have highly unequal levels of wealth, or who are poorly informed about the consequences of the project, or whose preferences fail for other reasons to register projects that would enhance their well-being”).


229 See Ahdieh, supra note 162, at 51 n.40 (discussing challenges of interpersonal comparisons of utility).


231 See Revesz & Livermore, supra note 33, at 180 (discussing the ways in which regulatory costs and benefits may fall disproportionately on a subpopulation).

232 See Adler & Posner, supra note 36, at 190 (outlining limitations of Kaldor-Hicks efficiency analysis).
associated with the proposed regulation's generation of costs at one level of wealth versus another.\textsuperscript{233} Where the status quo or a proposed regulatory intervention is grounded in—or gives rise to—an asymmetric allocation of benefits, the rigid application of cost-benefit analysis is necessarily more problematic.\textsuperscript{234}

Perhaps most directly relevant to the form of cost-benefit analysis, however, are distributional questions attendant to the analysis itself. As we will see with regard to Section 106, the operative variables of a given cost-benefit analysis provision may variously favor the interests of one interested party or another.\textsuperscript{235} As the demands of investor protection, efficiency, and capital formation are successively weighed, the costs and benefits of each are distributed in uneven—yet predictable—ways. Such patterns must necessarily be integrated into any regulatory analysis if it is to be useful.\textsuperscript{236}

\textbf{D. The Variables to Be Weighed}

Finally, the form of cost-benefit analysis in a given setting—as well as the wisdom of its application—are necessarily impacted by the nature of the variables to be considered. To begin, one might ask whether the relevant legislative or executive charge (if any) speaks \textit{explicitly} to the evaluation of "costs" and "benefits." While certain cost-benefit provisions do so, others do not. Many, meanwhile, refer to costs, but not benefits. The National Energy Conservation Policy Act, for example, speaks of "cost-effectiveness."\textsuperscript{237} The NSMIA, on the other hand, makes no reference to costs or benefits, instead citing

\begin{itemize}
  \item \textsuperscript{233} See Michael J. Trebilcock, \textit{The Role of Insurance Considerations in the Choice of Efficient Civil Liability Rules}, 4 J.L. ECON. & ORG. 243, 247 (1988) ("[A] given loss reduces the utility of a rich person less than a poor person . . . ."). A separate but related question is the treatment of loss aversion in the analysis of costs and benefits, at least in some appropriate settings. \textit{See} Adler & Posner, \textit{supra} note 36, at 238–41 (describing "endowment dependence" in cost-benefit analysis).
  \item \textsuperscript{234} An obvious case of this would be the application of tax-and-transfer policies. As to such policies, a distributionally insensitive cost-benefit analysis would see no gain. Tax-and-transfer policies, however, might in fact be correlated with a significant overall increase in well-being. \textit{See} Adler, \textit{supra} note 64, at 272–73 (noting welfare gains associated with such policies yet not captured by cost-benefit analysis).
  \item \textsuperscript{235} \textit{See infra} Part IV.B.3 (suggesting orientation of Section 106's individual factors to different groups).
  \item \textsuperscript{236} In unpublished work, David Arkush suggests an even more fundamental distributive flaw that may be inherent in cost-benefit analysis: a status quo bias that assumes current conditions capture what is most valued—absent evidence of some market failure. As Arkush notes, this constitutes an odd starting point in evaluating potential regulatory initiatives—perhaps most of all in the context of emerging financial technologies, from credit default swaps to high-frequency trading. Arkush, \textit{supra} note 33, at 2–3.
  \item \textsuperscript{237} 42 U.S.C. § 8256(b)(3)(A) (2006) (listing the requirements to be considered when disbursing funds from the Federal Energy Efficiency Fund).
\end{itemize}
"investor protection" as the operative benefit of SEC rulemaking, with potential costs arising from reductions in efficiency, competition, or capital formation. It requires no great commitment to textualism to appreciate that such terminological choices should impact choice of form. This is especially true where, as here, "cost" and "benefit" have come to resemble statutory terms of art—however ambiguous they might remain in actual practice.

The implications of a statute's explicit versus implicit reference to costs and benefits for the form of any resulting cost-benefit analysis suggests a second point: In its simplest form, cost-benefit analysis involves the weighing of some singular cost against some singular benefit—whether it has explicitly been framed as such, or because a multiplicity of enumerated variables can be reduced to a single metric of cost and/or benefit. In other cases, by comparison, one might find a multiplicity of irreducible variables on one or both sides of the ledger. Such an enumeration might include costs or benefits among the relevant considerations, but also might not—as in the provision of interest herein.

The ability to reduce multiple variables to one will often turn on their quantifiability. Questions of quantifiability, however, may arise even with a single variable on each side of the ledger. Much of the existing literature about cost-benefit analysis is thus concerned with whether, and how, we can quantify the cost associated with an increased risk of death or injury.

As any regulatory assessment moves away from calculation of a limited number of tractable variables, important potential benefits of cost-benefit analysis may be undermined. If the putative function of cost-benefit analysis in a given setting is transparency, the limitation of interest-group influence, the control of cognitive biases, or even the


239 As suggested above, it might also include "costs" as a factor but not "benefits."

240 See Ackerman & Heinzerling, supra note 171, at 1584 (arguing that cost-benefit analysis is flawed in its attempt to quantify unquantifiable values); see also Victor B. Flatt, Saving the Lost Sheep: Bringing Environmental Values Back into the Fold with a New EPA Decisionmaking Paradigm, 74 WASH. L. REV. 1, 9 (1999) (describing how cost-benefit analysis fails in the environmental context because the relevant variables cannot be reduced to numeric values).

241 This emphasis includes questions regarding the widespread reliance on subjects' willingness to pay rather than willingness to accept; the use of relatively dated, and industry-specific, wage premium studies; and the complexity of discounting future risks. See McGarity, supra note 63, at 2355, 2370 (discussing these three questions).
enhancement of efficiency, then the need to weigh a multiplicity of variables or to calculate the incalculable counsels against its use. Minimally, the intractability of the relevant variables encourages more modest cost-benefit analysis, perhaps at least counseling a procedural, rather than substantive, approach.

A final—and more fundamental—aspect of the variables to be weighed is also worth noting. Questions of quantifiability relate to, but differ from, the question of whether the variables on each side of the ledger fall on the same scale—what some have described as the issue of "incommensurability." In essence, can the variables on each side be balanced against one another? When we can reduce the operative variables to monetary costs and benefits, they obviously can. Mere subtraction will suffice. Where one or more variables on each side are properly measured on different scales, by contrast, any such balancing of the ledger becomes impossible.

At least in some cases, moreover, even where we can compare the variables on each side of the equation, this may not be the operative mandate. Thus, it is essential to identify, in any given cost-benefit analysis, what precisely the relevant agency is charged to do with the variables under consideration. Is it to balance them against one another, or something entirely different? Under Section 106, I will suggest, the charge of cost-benefit analysis is to weigh, consider, and assess—but not by way of subtraction. Rather, it is an exercise in addition.

IV

The Cost-Benefit Analysis of Section 106

Having posited a broader array of potential functions of cost-benefit analysis than has commonly been acknowledged and having offered a framework for evaluating the optimal form that cost-benefit analysis might take in a given setting, we can return to Section 106's requirement that the SEC "consider" the implications of its regulatory actions on "efficiency, competition, and capital formation." Many of the most familiar justifications for cost-benefit analysis have little application to Section 106. The efficiency rationale of achieving optimal outcomes and the nonefficiency rationale of limiting regulatory initiative, by contrast, each capture something of the function of

242 See supra Part II (analyzing the functions of cost-benefit analysis).
243 See supra note 209 and accompanying text (describing procedural versus substantive cost-benefit analysis).
Section 106. Section 106 is best understood, though, as an unusual case of Congress seeking to mandate agency consideration of factors it otherwise could not integrate into the SEC's substantive regulatory analysis.

As to form, meanwhile, Section 106 emerges as a true mandate, but one imposed on an independent agency operating outside the traditional realm of risk regulation. Further, its multiplicity of difficult to quantify factors generates not only significant complexity, but its own distributional implications—even beyond those that characterize the underlying financial markets. For that reason, among others, a traditional balancing approach has limited utility under Section 106.

Against this backdrop, it becomes possible to articulate a more systematic approach to the nature of the SEC's obligation under Section 106, the nature of the analysis it should undertake, and the nature of any ensuing review. Section 106 does, in fact, impose a duty on the SEC, though it is a procedural rather than a substantive one. The analysis it mandates, further, should be rigorous—particularly in its attention to distributional concerns—but it should not be understood as a rigidly quantitative exercise, let alone as one keyed to balancing costs and benefits. Contrary to the views of some, finally, judicial review of SEC analysis under Section 106 is appropriate. It must, however, be highly deferential.

A. The Function of Section 106

1. Efficiency Functions of Section 106?

Although broadly consistent with the promotion of efficiency, it is difficult to cast Section 106 as primarily directed to that purpose. In particular, given both its terms and its context, Section 106 does not seem to reduce cognitive biases or foster efficient priority setting in any significant way.

Cognitive failure is not commonly seen as a central consideration in the regulatory decisionmaking of the SEC. Financial regulation is not the realm of risk regulation, where we regularly worry about alarmist or availability biases producing significant misjudgments about relevant harms.245 The questions at stake in securities regulation do not, for the most part, provoke such concerns.

What may be the most significant exception, meanwhile, would arguably cut against the mandate of Section 106. A crucial risk in securities regulation—made plain in recent years—is the "black swan"

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245 See supra notes 135–36 and accompanying text (discussing cognitive biases, including alarmist and availability biases).
event we blithely disregard. It is systemic risks, and the possibility of catastrophic failure, that we are prone to over-discount. Section 106 may actually aggravate this bias, however, rather than reduce it: By adding efficiency, competition, and capital formation alongside the SEC's conventional emphasis on investor protection, we may divert attention from the systemic risks facing the market.

The relative visibility of the factors enumerated in Section 106 also cuts against an understanding of cognitive bias as the provision's primary motivation. Efficiency, competition, and capital formation are unlikely to be overlooked—or even underappreciated—in regulation of the securities markets. Tellingly, even before enactment of the NSMIA, the SEC voluntarily weighed the costs of its regulatory proposals against their benefits.

Criticism of the SEC, meanwhile, has not focused significantly on the possibility of cognitive bias in its rulemaking—be it availability bias, informational cascades, or other behavioral errors. While its regulatory initiatives are not without controversy, they are not commonly critiqued on these particular grounds. Rather, the SEC has alternatively been cast as either overly solicitous of investors or inadequately attuned to potential market efficiencies.

An account of Section 106 as directed to investors' cognitive biases is easier to imagine. The high visibility of financial scandals—

246 See Nassim Nicholas Taleb, The Black Swan: The Impact of the Highly Improbable, at xvii–xviii (2007) (defining such an event as one that is rare, has an extreme impact, and is retrospectively explained as predictable).


248 To be clear, there is nothing inherent in cost-benefit analysis that dictates this result. One could readily imagine a statutory provision—especially after the recent financial crisis—that is designed to undercut operative cognitive biases by mandating “consideration” of relevant low-probability, high-risk events, or of data directed to those possibilities.

249 See supra note 69 and accompanying text (describing the beginnings of the SEC's voluntary cost-benefit analysis).

250 This might be traced, at least in part, to the SEC's multimember structure. See supra note 210 and accompanying text (discussing the appropriate standard for cost-benefit analysis with independent agencies). Its relatively open decisionmaking process might also contribute to this sense of the agency.

251 To be sure, many critics would challenge this characterization, suggesting the SEC has been too keen to accommodate industry wants and needs. Cf. Francis J. Facciolo, Father Knows Best: Revised Article 8 and the Individual Investor, 27 Fla. St. U. L. Rev. 615, 680–81 (2000) (noting issues of regulatory capture in securities regulation); see also Joseph A. Franco, A Consumer Protection Approach to Mutual Fund Disclosure and the Limits of Simplification, 15 Stan. J.L. Bus. & Fin. 1, 60–61 (2009) (arguing for increased disclosure of technical information that may not be comprehensible to the average investor but would be useful to intermediaries on a consumer-protection justification). These critics, on the other hand, are rarely advocates of increased cost-benefit analysis.
from Charles Ponzi’s complex schemes to Bernie Madoff’s very simple one—could foster investor attitudes akin to the inaccurate appraisals of cancer. Individual investors plagued by availability or alarmist biases, or by an on-screen/off-screen mindset, may come to see fraud as a far greater risk than it actually is. The persistence of high levels of investment even after the revelation of such prominent frauds, on the other hand, would seem to argue against this concern. A conception of Section 106 as directed to cognitive bias is difficult to reconcile with the central role of such investors. While cognitive biases are possible even within large and sophisticated institutions, they seem relatively less likely to arise in those settings—and even less likely to persist.

Given the broad factors it enumerates, Section 106 is also a poor tool of priority setting. To begin, it continues to fix investor protection as the SEC’s core responsibility. In “efficiency, competition, and capital formation,” more importantly, Section 106 does not enumerate


\footnote{253 See Christine Jolls et al., A Behavioral Approach to Law and Economics, 50 Stan. L. Rev. 1471, 1518 (1998) (describing judgment errors by individuals based on the “availability” of relevant harms).}

\footnote{254 See Adam Shell & Matt Krantz, Are Main Street Investors Warming Up to Stocks?, USA TODAY (Jan. 24, 2013), http://www.usatoday.com/story/money/markets/2013/01/24/new-stock-highs-lure-main-street-back-to-market/1861789/ (discussing retail investors’ return to the stock market).}


\footnote{256 See Alan D. Miller & Ronen Perry, The Reasonable Person, 87 N.Y.U. L. Rev. 323, 342 n.78 (2012) (noting that large institutions may be more capable of acquiring and assessing information than individuals).}

specific topics that might define the SEC's agenda. As to whatever subject matter priorities the SEC chooses, rather, Section 106 enumerates considerations to be weighed in its regulatory calculus.

Issues of priority setting, furthermore, have not been a source of significant concern with the SEC. Even among its critics, the objections are not so much with the Commission's choice of priorities as they are with the substantive regulatory choices it makes as to any given priority.\textsuperscript{258} Legislative attention to the SEC comes in fits and bursts, meanwhile, commonly driven by industry lobbying regarding particular questions, rather than any congressional intent to shape the Commission's agenda more generally.\textsuperscript{259}

By contrast with the reduction of cognitive bias and the setting of priorities, the efficiency function of facilitating optimal outcomes should be understood as at least part of Section 106's function.\textsuperscript{260} Generally, one might see every statutory charge to an agency as seeking improved outcomes at some level. Minimally, one would expect Congress to believe as much. But the goal of encouraging optimal outcomes seems relatively more applicable to Section 106 for at least three reasons.

The subject matter of Section 106, to begin, makes an orientation to efficient results especially appropriate. Although efficiency can surely be evaluated with respect to environmental protection or workplace safety as well, it would seem part and parcel of any analysis of securities regulation.\textsuperscript{261} Secondly, and more importantly, one might think of efficiency as—in some respects—a natural counterpoise to the SEC's traditional focus on investor protection. Investor protection is essential to the operation of efficient capital markets.\textsuperscript{262} Mandatory


\textsuperscript{259} See Robert B. Thompson, \textit{Defining the Shareholder's Role, Defining a Role for State Law: Folk at 40}, 33 Del. J. Corp. L. 771, 774 (2008) (noting that Congress only sporadically focuses on securities law, and usually only after a crisis).

\textsuperscript{260} See supra Part II.A.1 (describing the efficiency function of cost-benefit analysis in generating improved outcomes).

\textsuperscript{261} See Schwarcz, supra note 247, at 205–06 (highlighting efficiency as a central goal of the securities laws); see also George J. Stigler, \textit{The Citizen and the State} 88 (1975) (arguing that efficient capital markets protect investors).

\textsuperscript{262} See John L. Orcutt, \textit{Improving the Efficiency of the Angel Finance Market: A Proposal to Expand the Intermediary Role of Finders in the Private Capital Raising Setting}, 37 Ariz. St. L.J. 861, 935 (2005) (explaining that investor protection and confidence in the market are critical to efficiency); Ethiopis Tafara & Robert J. Peterson, \textit{A Blueprint for
disclosure, meanwhile, is commonly believed to enhance market efficiency. On the other hand, a great deal of investor protection comes at the cost of efficiency—whether in terms of opportunities for competition, or the ease of capital formation. By mandating the consideration of efficiency, competition, and capital formation alongside a continued emphasis on investor protection, thus, we might understand Congress to be seeking more optimal outcomes in the financial markets. Finally, and most simply, Section 106's explicit reference to the consideration of "efficiency" also supports an understanding of increased efficiency as part of the provision's function.

All of that said, several factors counsel against a conception of Section 106 as being primarily about facilitating optimal outcomes. The provision requires, to begin, only that the SEC "consider" efficiency, competition, and capital formation. If optimal ends were the priority, one might instead expect a mandate that the SEC "determine" whether a proposed rule advanced the ends of efficiency, competition, and capital formation. Stating it differently, a mandate of substantive rather than procedural cost-benefit analysis would seem more appropriate.

Incorporation of the new factors alongside investor protection in Section 106 also supports this conclusion. Whatever desire for optimal


See _Facciolo, supra_ note 251, at 681 (noting that the goals of investor protection and efficiency may sometimes conflict).


In addition to the arguments offered above, Posner and Weyl suggest another reason to question an account of Section 106 as primarily directed to facilitating allocative efficiency: In financial regulation, the "efficiency" goal of interest tends to be informational, rather than allocative, efficiency. Cf. Posner & Weyl, _supra_ note 68, at 393 (explaining that asset pricing generally is concerned with "whether prices are predictable rather than whether welfare is maximized").

See _supra_ note 77 and accompanying text (noting the relatively weak language of Section 106).

See Johnston, _supra_ note 15, at 1351–52 (explaining the difference between substantive and procedural cost-benefit statutes).
ends might be manifested in Section 106, its continued emphasis on investor protection would seem to counsel something less than the systematic analysis of efficiency offered by conventional cost-benefit analysis.\textsuperscript{269} Section 106 may thus serve some purpose of fostering efficiency by encouraging optimal outcomes. But it does so to a lesser degree than in the ordinary case of cost-benefit analysis. To the extent that Section 106 does promote efficiency, in fact, it might best be understood to do so simply in the (debatable) sense that less (regulation) is more.\textsuperscript{270}

2. Nonefficiency Functions of Section 106?

Turning to potential nonefficiency functions of Section 106, constraining the overall volume of regulation should surely be understood as part of its purpose.\textsuperscript{271} This is evident from the political context of its adoption.\textsuperscript{272} Section 106 was enacted during the mid-1990s heyday of Republican control of both houses of Congress and fits squarely within the deregulatory agenda of that period.\textsuperscript{273} From this vantage, the NSMIA's preemption of state securities law should not be understood as a decision in favor of federal securities regulation. Rather, preemption was merely one side of the coin, in a strategy to reduce overall constraints on the securities markets.\textsuperscript{274} Section 106 is the flip side—with its constraint on federal initiative in securities regulation as well.

\textsuperscript{269} Cf. Michael A. Livermore, A Brief Comment on "Humanizing Cost-Benefit Analysis," 2011 EUR. J. RISK REG. 13, 14 (noting the "focus on economic efficiency" in "standard cost-benefit analysis").

\textsuperscript{270} Stating it differently, Section 106's promotion of efficiency might be seen as not about improved regulation, but rather less of it. While this is potentially an argument about efficiency, it is not inherently so. See supra Part II.B.1 (considering the role of cost-benefit analysis as a means to restrain regulation).

\textsuperscript{271} See supra Part II.B.1.


\textsuperscript{274} See Jennifer J. Johnson, Private Placements: A Regulatory Black Hole, 35 DEL. J. CORP. L. 151, 181–82 (2010) (explaining that the NSMIA was intended to eliminate certain regulations through preemption).
The antiregulatory character of Section 106, however, should not be overstated. As noted, the provision makes clear that investor protection remains the SEC's baseline directive.\textsuperscript{275} The nature of Section 106 as a brief entry in a statute primarily directed to other questions also favors a modest view of its function as a barrier to regulatory activity generally.\textsuperscript{276} Likewise, its interpolation as a disconnected clause in the definitions sections of each of the statutes amended by the NSMIA counsels against such an expansive view.\textsuperscript{277}

More generally, the SEC has not been a prominent target of antiregulatory initiatives, at least outside certain selected contexts. This was true even amidst the push for cost-benefit analysis and deregulation generally, following the 1994 midterm elections.\textsuperscript{278} Even where the SEC has been the target of such efforts, moreover, there has not been any strong orientation to cost-benefit analysis as the weapon of choice. The recently enacted JOBS Act, for example—notwithstanding its goal to reduce the regulatory burdens imposed by the SEC—included no requirement of cost-benefit analysis.\textsuperscript{279}

Whatever shortcomings one might see in a conception of Section 106 as functioning to discourage regulatory initiative, that account is still more plausible than one in which the SEC's consideration of efficiency, competition, and capital formation is designed to promote overall well-being, to increase transparency, or to facilitate agency monitoring.\textsuperscript{280} It is not clear how Section 106 might be understood to promote well-being—where emphasis on well-being (as distinct from efficiency) is meant to highlight potential distortions in formal preferences.\textsuperscript{281} The latter concern is of necessarily diminished relevance to modern capital markets, given the growing dominance of institutional investors—whose preferences are relatively less likely to exhibit such distortions.\textsuperscript{282} More fundamentally, the language of Section 106 would not appear to be directed to well-being broadly defined. To the

\textsuperscript{275} See National Securities Markets Improvement Act of 1996 § 106, 15 U.S.C. § 77b (2012); see also supra note 257 and accompanying text.

\textsuperscript{276} See supra note 74 and accompanying text (noting that the NSMIA was primarily directed toward preempting state law).

\textsuperscript{277} See supra note 76 and accompanying text.

\textsuperscript{278} Cf. Johnston, supra note 15, at 1345 n.7 (describing congressional drive for regulatory reform).

\textsuperscript{279} See Cox & Baucom, supra note 14, at 1835 n.155 (summarizing the JOBS Act's requirements).

\textsuperscript{280} See supra Part II.B (describing these potential goals of cost-benefit analysis).

\textsuperscript{281} See supra Part II.B.2 (contrasting well-being with efficiency).

\textsuperscript{282} See Grundfest, supra note 255, at 6–7 (noting the rise in institutional investors).

\textsuperscript{283} See Mark Simon et al., Cognitive Biases, Risk Perception, and Venture Formation: How Individuals Decide to Start Companies, 15 J. BUS. VENTURING 113, 127 (1999) (arguing that collective deliberation may help alleviate individuals' cognitive biases).
contrary, it might best be read to point in the opposite direction, favoring efficiency over generalized well-being. Strengthened investor protection might thus be the optimal means to maximize well-being—rather than a heightened emphasis on efficiency, competition, and capital formation.

As for a conception of Section 106's function as increasing transparency, the latter is not commonly raised as a concern with the SEC.\textsuperscript{284} This might potentially be traced to its status as an independent agency, its narrow and distinct expertise, or even the extent of industry attention to its work. In any case, transparency is not generally seen as lacking—cutting against a conception of Section 106 as primarily functioning to increase transparency.

Beyond that, the indeterminate nature of Section 106's requirements of "efficiency" and "competition" (and even "capital formation") argues against a transparency-enhancing account of its function. It is not clear that the analysis of such vague platitudes would meaningfully enhance public insight into the SEC's reasoning or into the implications of its choices. This is especially so given its mandate merely to "consider" those factors.\textsuperscript{285}

For the same reason, it is difficult to see how the charge to consider efficiency, competition, and capital formation would reduce interest-group influence.\textsuperscript{286} Given its content, Section 106 does not focus consideration on a readily understood and externally evaluated set of questions or reduce relevant variables to a form that might render industry influence more visible. To the contrary, Section 106 might actually increase interest group influence.\textsuperscript{287} Most obviously, the provision offers a ready tool for lobbying against proposed SEC rules. The open-ended nature of any evaluation of "efficiency, competition, and capital formation," in turn, makes it especially effective in that regard. As we have seen, Section 106 may also facilitate post hoc interventions in the courts.\textsuperscript{288}


\textsuperscript{285} See Driesen, supra note 159, at 78–80 (arguing that cost-benefit analysis does not increase transparency if the analysis is not disclosed).

\textsuperscript{286} See supra notes 173–77 and accompanying text (analyzing how cost-benefit analysis might reduce interest group influence).

\textsuperscript{287} See Driesen, supra note 159, at 83–85 (explaining the ways interest groups exert influence through cost-benefit analysis).

\textsuperscript{288} Cf. Johnston, supra note 15, at 1358 (describing analogous multistage game of industry resistance to regulatory constraint, with resistance at the legislative phase preceding attempts to shape agency rulemaking).
Section 106 might more plausibly be evaluated as a means of SEC monitoring by the President and/or Congress.289 Ultimately, though, this account of Section 106's function also falls short. Because the SEC is an independent agency, the emphasis on such political monitoring is diminished.290 One might argue, to be sure, that the limits on political oversight increase the importance of other monitoring devices, including cost-benefit analysis. Recall, though, that the model of cost-benefit analysis as a tool of agency monitoring casts it not as a mechanism of control, but as a means to generate the information necessary for the President or Congress (as principal) to effectively control their agent.291 The willingness to relinquish more direct means of control when it comes to independent agencies, thus, cuts against an account of cost-benefit analysis as serving that purpose here.

This conclusion is also supported by Congress's relative inattention to the SEC.292 It is true that Congress has sometimes been at odds with the SEC, including in the period surrounding adoption of Section 106.293 On the other hand, the expression of those conflicts in the form of legislative undertakings has been rare. Finally, the mandate to merely "consider" Section 106's enumerated factors, together with their indeterminate nature, also undercuts a conception of Section 106 as serving to facilitate political monitoring of the SEC. The SEC's mere consideration of efficiency, competition, and capital formation seems unlikely to generate useful information for the President or Congress in monitoring the SEC.294

289 See supra Part II.B.4 (explaining this function).
292 See Cox & Baucom, supra note 14, at 1821–23 (noting Congress's hands-off approach to the SEC).
293 See, e.g., id. at 1822–23 (citing congressional criticism of the SEC's implementation of the NSMIA); Paula Dwyer, Hardball at the SEC, BUS. WK., Sept. 29, 1997, at 50 (explaining congressional backlash against aggressive SEC action); Congress and the Accounting Wars, PBS, http://www.pbs.org/wgbh/pages/frontline/shows/regulation/congress/index.html (last visited Aug. 24, 2013) (noting Congress's threats to the SEC's funding). More generally, the Republican majority in control of Congress in 1996 was committed to an agenda of deregulation. See Spiller & Tiller, supra note 154, at 361 (noting Republican efforts to limit regulation).
294 The legislative history of Section 106 also offers little support for an account of it as a mechanism of agency monitoring. See Cox & Baucom, supra note 14, at 1819–20 (noting rejection of language requiring a report on the costs and benefits of proposed regulations). The failure of the JOBS Act to direct the SEC's decisionmaking more forcefully might also be cited in this regard. See id. at 1835 n.155 (noting the limited assessment of costs required by the act).
What, then, of the final function of cost-benefit analysis outlined above—of defining the scope of agency analysis, by enumerating relevant factors for consideration? As the foregoing discussion suggests, Section 106 might plausibly be seen to serve some role in promoting optimal outcomes. It may also serve to reduce the volume of federal securities regulation generally. Section 106 is best understood, however, as serving to define the nature of the SEC’s expected analysis in rulemaking.

Since its creation, the core mission of the SEC has been the protection of investors. The framers of the Securities Exchange Act saw investor protection as critical to a vibrant yet stable economy. From the outset, thus, the SEC highlighted it as the “paramount goal of the securities laws.” This emphasis remained unchanged with the adoption of Section 106. The provision thus makes clear that the “protection of investors” remains the Commission’s baseline consideration.

Given as much, Section 106 is best understood to enumerate countervailing considerations for the SEC to weigh in evaluating regulatory options. In fact, even that may overstate it. With the provision’s explicit reference to investor protection, the considerations of efficiency, competition, and capital formation are less countervailing factors, than simply additional ones for the Commission to consider.

This understanding fits best with the provision’s mandate of “consideration,” rather than “determination,” “calculation,” or even “analysis.” More broadly, it is supported by a comparison with other congressional mandates to engage in cost-benefit analysis—in the UMRA, SDWA, and elsewhere—in which relevant agencies are explicitly charged to weigh “costs” on the one hand, and “benefits” on the other. In these cases, the agency’s clear mandate is to balance

295 See supra Part II.B.5 (explaining this potential function).
296 See supra Part II.A.1 (outlining the efficiency function of cost-benefit analysis in promoting optimal outcomes).
297 See supra Part II.B.1 (explaining this potential function of cost-benefit analysis).
300 Id. at 292.
302 See id.
those factors that favor a proposed rule against those that disfavor it. By comparison, the language of Section 106 reads much more like a listing of relevant factors for the agency's consideration.

This, of course, is a more modest function than many of the other possibilities enumerated above. Yet, this too is consistent with the nature of Section 106 as a minor provision of a legislative act primarily directed to other purposes—and with its casual interpolation at the end of the definitions section of the relevant legislative acts. That it is modest, more importantly, does not make it minor. To the contrary, much of administrative law is built around the requirement that agencies properly consider the factors enumerated by Congress in their organic statutes and other legislation that they administer.

As outlined above, moreover, this function can properly be understood—in appropriate cases—as a species of cost-benefit analysis. Where, as with Section 106, the considerations to be added into the mix will often cut against the results dictated by the currently prevailing analysis, Congress may find such “cost-benefit analysis” requirements to be effective in achieving its goals, yet far more politically palatable. With the adoption of Section 106, thus, Congress might be understood to have staked out the position that the substantial benefits of investor protection must be reconciled with its associated costs—in efficiency, competition, and capital formation. Unable to muster the political will to add these criteria as substantive statutory factors for the Commission to consider in its rulemaking, however, Section 106 presented itself as a second-best measure to the same ends.

Notably, an understanding of Section 106 as simply enumerating factors for SEC consideration is most closely aligned with the approach taken to it by the D.C. Circuit. In its three decisions on Section 106, the court relied most heavily on its prior decision in Public Citizen v. Federal Motor Carrier Safety Administration. Public Citizen was not a cost-benefit analysis decision, however, but a finding of arbitrary and capricious agency action based on the failure to properly weigh all factors enumerated in the applicable statute.

§ 300f–300j); see also supra notes 187–88 and accompanying text (noting other cost-benefit mandates).

304 See supra notes 72–76 and accompanying text.

305 See Beermann, supra note 183, at 740–41 (noting requirement to consider enumerated factors in agency rulemaking); Smythe, supra note 183, at 1939 (describing enumerated factors as exclusive variables for agency consideration).

306 See supra Part II.B.5.

307 374 F.3d 1209 (D.C. Cir. 2004).

308 Id. at 1211 (holding agency rulemaking to be arbitrary and capricious for “failure to take account of a statutory limit on its authority”).
What the D.C. Circuit was less clear about in its three decisions was whether it consequently thought of Section 106 as something besides a cost-benefit analysis provision. Notwithstanding its generalized analysis, the court’s talk of costs and benefits suggests it may have seen it both ways: as a cost-benefit analysis provision mandating SEC consideration of Section 106’s enumerated factors.

B. The Form of Section 106

Having identified the primary function of Section 106 as supplementing the SEC’s pursuit of investor protection with a consideration of selected factors that might counterbalance that goal, what can we say about the form of any analysis under Section 106? As outlined above, there are four clusters of questions against which Section 106 should be measured in evaluating the form it should take.309

1. Source of Law

The call for the SEC to consider “efficiency, competition, and capital formation” in its rulemaking comes, of course, by way of statute rather than executive order.310 Further, it arises from a statute specifically directed to the SEC311 rather than one applicable more generally—such as the UMRA.312 Given its instruction that the SEC “shall” consider,313 meanwhile, the provision is mandatory in nature, rather than simply an authorization of cost-benefit analysis. The scope of that mandate is limited, however, demanding consideration of the enumerated factors, but not any necessary conclusion.314

309 See supra Part III.
311 See id.
313 National Securities Market Improvement Act of 1996 § 106.
314 See Cox & Baucom, supra note 14, at 1839–42 (proposing SEC retreat from a conclusory analysis under Section 106); cf. Johnston, supra note 15, at 1352 (noting that “procedural cost-benefit statutes say nothing about how the agency strikes the cost-benefit balance; they merely require the agency to do the balancing”). An important, but separate, question concerns the origins of the regulatory undertaking being subjected to cost-benefit analysis. In the case of Business Roundtable, one might have expected the D.C. Circuit to take some greater account of Congress’s explicit authorization of a proxy access rule. See supra note 22–23 and accompanying text. In a sense, Congress might be said to have done some of the cost-benefit analysis itself. That Congress gave the SEC wide latitude as to the content of the rule would seem to lend yet further credence to this way of thinking. See Case Note, supra note 18, at 1089, 1094–95 (noting legislative history of the Dodd-Frank Act).
2. Responsible Agency

The SEC, of course, is an independent agency. It is comprised of five members who serve fixed, staggered terms. Commissioners can only be removed for "good cause" (including neglect of duty or malfeasance) and not for political reasons, such as failure to follow administration policy. To further assure its nonpartisanship, no more than three SEC commissioners may be appointed by one political party.

Like other independent agencies, the SEC's budget represents a fraction of the annual appropriations of most executive agencies. Its staffing is likewise dwarfed by the latter—from the Environmental Protection Agency to the Departments of Commerce, Defense, and others.

At least in the conventional sense, meanwhile, the SEC is not a risk regulator. Agencies such as the EPA, OSHA, NHTSA, and the like—with their focus on human health and safety—have traditionally been thought to represent the universe of risk regulators. By

319 In 2012, for example, the SEC's budget was $1.321 billion. OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, BUDGET OF THE UNITED STATES GOVERNMENT, FISCAL YEAR 2013, APPENDIX, at 1402, available at http://www.gpo.gov/fdsys/pkg/BUDGET-2013-APP/pdf/BUDGET-2013-APP-1-31.pdf. This was only slightly larger than the line items for both the U.S. Marshals Service, id. at 777 ($1.170 billion) and the Fish & Wildlife Service, id. at 703 ($1.282 billion). It was dwarfed, meanwhile, by the budgets of the Department of Commerce ($11.326 billion), the Department of Justice ($34.556 billion), and the EPA ($9.352 billion). See The Budget for Fiscal Year 2013, Historical Tables, at 83, available at http://www.gpo.gov/fdsys/pkg/BUDGET-2013-TAB/pdf/BUDGET-2013-TAB.pdf.
extension, they have been the focal point for use of cost-benefit analysis and (even more so) academic analysis of it.\textsuperscript{321}

On the other hand, the SEC's critical role in regulating—or at least mandating the disclosure of—investment risks makes it something of a "risk regulator."\textsuperscript{322} After the financial crisis, meanwhile, there can be little doubt about the critical role of financial regulators in minimizing systemic risk.\textsuperscript{323} The shift from health risks to market risks, however, likely limits the analogy to traditional risk regulators, in defining the appropriate form of cost-benefit analysis under Section 106.

3. The Nature of the Problem Presented

As to the nature of the problem presented, both the level of complexity and the distributional consequences at stake in the financial markets—and under Section 106—are substantial.\textsuperscript{324} As to complexity, any meaningful engagement with the efficient equilibrium of investor protection, competition, and capital formation will necessarily entail a mind-boggling array of questions.\textsuperscript{325} On their face, Section

\textsuperscript{321} See supra notes 187–89, 219–20 (describing the origins and primary application of cost-benefit analysis in areas of risk regulation).


\textsuperscript{324} See supra Part III.C. In addition to the sources of complexity outlined above, at least two others might also be noted. First, the terrain that financial regulation seeks to shape is prone to rapid adjustment. By contrast with areas in which regulation is directed to physical processes, financial "institutions and activities [...] exist largely on paper—and that paper can be rewritten quickly." Arkush, supra note 33, at 2. The high degree of interconnectedness across myriad spheres of financial regulation—and among the regulatory mandates of the Dodd-Frank Act alone—represents yet another source of complexity. See id.

\textsuperscript{325} See Current Guidance, supra note 69, at 10 (discussing the difficulty in reliably estimating a regulation's costs and benefits); Mongone, supra note 16, at 756 (noting the "lack of definitive or readily quantifiable empirical data and the unpredictable nature of certain costs" in financial regulation (internal citation omitted)). Consider Rule 14a-11's provision of proxy access: Notwithstanding the forcefulness of Business Roundtable's critique of the SEC's analysis, determining the actual impact of proxy access turns out to be an almost impossibly complex task. See Hayden & Bodie, supra note 18, at 125–29; Mongone, supra note 16, at 780 nn.182–83 (describing how reality is not as straightforward as theory); D. Gordon Smith et al., Private Ordering with Shareholder Bylaws, 125 Fordham L. Rev. 125, 166 n.299 (2011) ("Given the stock of empirical knowledge we have today, I submit that the only responsible answer to [what the amendments mean for investors] is a cautious combination of 'it depends,' or 'we don't fully know.'" (quoting Eric Talley, Proxy Access Forum, The Conglomerate (Aug. 26, 2010), http://www.theconglomerate.org/forum-proxy-access (alteration in original))). This is true even simply as a matter of corporate governance and capital market efficiency. In addition, however,
106's enumerated variables generate a striking degree of complexity. That complexity grows exponentially, however, when we recognize the dizzying array of subfactors embedded within them.326

There are also significant tensions among those factors, which further increase the degree of complexity. Obviously, there is the facial tension between the goal of investor protection and the goals of efficiency, competition, and capital formation. But even as between efficiency, competition, and capital formation, conflicting imperatives will often arise. Competition may sometimes be inefficient and may negatively impact capital formation. Informational efficiency, meanwhile, may be undercut by certain mechanisms of capital formation.327

The distributional dynamics at work present comparable challenges—as to the ex ante equilibrium to be regulated, and as to the implications of the Section 106 analysis itself and any regulatory undertakings it might counsel or discourage. The baseline distributional issues in the capital markets, to begin, are substantial. Most obviously, this is grounded in the unequal distribution of wealth. More important for our purposes, though, is the significant variation in investors’ level of sophistication—and associated information asymmetries.328 To some degree, such discrepancies arise even within any given category of investors. As between institutional and individual investors, however, the divergence is all but immeasurable.329 Any cost-benefit analysis in the realm of financial regulation that disregards distributional issues, as a result, would necessarily lead us astray.

proxy access also engages complex questions of democratic process. See William S. Jordan III, News From the Circuits, 37 ADMIN. & REG. L. NEWS 20, 23 (2012) (drawing an analogy between “electoral democracy” and “shareholder democracy” and arguing that the SEC was reasonable in assuming that proxy access would improve corporate governance); Hayden & Bodie, supra note 18, at 133–37 (detailing complex academic accounts of the value of shareholder democracy).

326 Consider all the potential determinants of “efficiency,” or even of “competition.”

327 The preference of certain institutional and other large investors to shield their trading from ready visibility—for many reasons, including the understandable desire to minimize price movement against them—is suggestive. See Kiran Kumar et al., Hiding Behind the Veil: Informed Traders and Pre-Trade Opacity, SEC.GOV 1–6 (March 1, 2010), available at http://www.sec.gov/divisions/riskfin/seminar/yadav041812.pdf (studying hidden orders).


Even if we leave aside the baseline distributional imbalances in the financial markets, however, Section 106 holds its own distributional consequences. Though not apparent on its face, such impacts are embedded in Section 106's enumerated factors as applied. While "investor protection" is nominally relevant to any investor, institutional and other sophisticated investors can largely protect their interests—including by securing desired disclosures—regardless of any regulatory mandate. The SEC's investor protection function has thus come to be thought of as directed primarily to retail investors, and to other investors only secondarily.

On the other side of the ledger, "capital formation" is likely to speak primarily to the interests of institutions—be they investment funds or capital-seeking business entities—rather than individual investors. "Competition"—like investor protection—will often cut the other way. Competition may benefit retail investors, thus, to the extent that it lowers the cost of trading—for example, by undermining the system of fixed commissions. At some level, this might be useful for institutional investors as well. On the other hand, even limited competition may suffice for institutional investors, given their ability to secure beneficial pricing even in a constrained market. Also notable may be circumstances in which institutional investors and other large investors do not seek competition—as with the insulation of trading from the public through the "dark pools" of the upstairs market. Even as this choice undercuts price competition (and price


332 But see Bradford, supra note 257, at 99 (noting the role of crowdfunding exemptions from securities law in facilitating capital formation by small businesses).

333 Cf. George W. Dent, Dual Class Capitalization: A Reply to Professor Seligman, 54 GEO. WASH. L. REV. 725, 731 n.44 (1986) (Rules 19c-1 and 19c-3). Such commissions were long mandated by the New York Stock Exchange under Rule 394. Id. at 731 n.45.

334 See Paredes, supra note 330 (noting the ability of institutional investors to protect their interests); Robert A. Prentice, The Inevitability of a Strong SEC, 91 CORNELL L. REV. 775, 789 (2006) (noting that opponents of strong securities regulations claim sophisticated institutional investors can protect themselves).

335 See infra note 338 and accompanying text (noting the preference of certain institutional investors for speed and anonymity over best execution).
efficiency)—thereby harming retail investors—it may be valuable to large investors.336

Section 106's aspiration to "efficiency," finally, does not consistently tilt toward one category of investor versus the other. Problematically, however, this is largely true because of its tendency to favor one group or the other, depending on the particular regulation in question. Efficiency may nominally be good for all investors.337 But in practice, certain types of efficiency will favor certain types of investors.

Generalized efficiency, in terms of increased competition and reduced transaction costs, likely favors retail investors more strongly, for the reasons already suggested.338 The same is true of price efficiency, with many large investors concerned more with speed than with price.339 The liquidity gains associated with more efficient markets, on the other hand, may cut either way—though for different reasons. For institutional investors, the liquidity of the public markets may be less vital at one level, given their access to alternative trading platforms.340 On the other hand, it may be more crucial at certain times, given their relatively higher degree of market exposure.341 As to retail investors, meanwhile, they may sometimes face greater harm than institutional investors from illiquidity—perhaps in the face of a sudden need to shift their assets to cash. Given their relatively non-
diversified portfolios, on the other hand, such investors receive relatively less of the upside of liquid markets.342

4. The Variables to be Weighed

Section 106, of course, does not speak explicitly of costs and benefits—though its legislative history does so.343 Further, it is not limited to the measurement of two variables against one another, but introduces three additional factors to be weighed alongside the baseline consideration of investor protection.344

Its factors are fairly quantifiable, meanwhile, at least as a relative matter. By contrast with the risks associated with arsenic in drinking water, or the benefits associated with passive restraint systems in automobiles, the variables enumerated in Section 106 largely—though not exclusively—involve monetizable activities and their consequences. Whether there is competition might thus be measured by bid-ask spreads; levels of capital formation can likewise be evaluated across markets or across time; and even efficiency, depending on how it is defined, can be assessed using the extent of price volatility—among other potential measures.345 Investor protection may be somewhat more difficult to quantify, given the soft variables we might count as part of it. Even there, however, market capitalization, the frequency of fraudulent activity, and the like might readily be measured and evaluated.346

The identification of such metrics, however, answers the wrong question. The issue is not whether one can find measures that are reasonable proxies for the enumerated factors in Section 106. Surely one can—and likely can do so more readily in the context of Section 106 than in other areas in which cost-benefit analysis has been more

342 Also relevant may be their more limited capacity to hedge risks. See Houman B. Shadab, Fending for Themselves: Creating a U.S. Hedge Fund Market for Retail Investors, 11 N.Y.U. J. LEGIS. & PUB. POL’y 251, 255 (2007) (noting retail investors’ more limited tools to limit risks).
343 See supra notes 78–86 and accompanying text.
346 See, e.g., Rafael La Porta et al., Law and Finance, 106 J. POL. ECON. 1113 (1998) (measuring level of investor protection across forty-nine jurisdictions); Rafael La Porta et al., Legal Determinants of External Finance, 52 J. FIN. 1131 (1997) (same).
commonly applied. The critical question, however, is whether these metrics effectively quantify the extent of efficiency, competition, capital formation, and investor protection in one equilibrium state versus another. This is a far more difficult task—perhaps even compared to other settings in which cost-benefit analysis is used.

The sweeping nature and indeterminacy of the variables to be weighed under Section 106 may thus make them difficult to evaluate, even compared to the risk of death, dismemberment, or reduced life expectancy. Surely this is true of efficiency and competition, which are more in the nature of first principles than particular and determinate variables to be analyzed and weighed.\textsuperscript{347} Even investor protection and capital formation, however, do not lend themselves to ready capture by one, or even multiple, metrics.\textsuperscript{348}

Finally, there is nothing in either the language of Section 106 or the nature of the analysis it mandates that suggests a \textit{balancing} of costs and benefits as the intended statutory prescription\textsuperscript{349}—by contrast with conventional conceptions of what cost-benefit analysis entails. As to language, the distinct emphasis on investor protection cuts against the notion that it should be balanced against the demands of efficiency, competition, and capital formation.\textsuperscript{350} That the foregoing are merely to be \textit{considered} affirms this conclusion—suggesting no necessary equation of the factors on each side of the ledger.

Even beyond the text, Section 106's enumerated factors do not lend themselves to a cost-benefit balancing. First, they do not consistently pull in one normative direction versus the other, and thus cannot be reduced to "costs" and "benefits."\textsuperscript{351} To related effect, they do not readily fall on the same scale—of dollars or otherwise.\textsuperscript{352} This is especially true of investor protection, to the extent it is understood to encompass variables not captured in monetary terms, including perceived risks, the psychic externalities associated with market losses, and the like. Ultimately, and in line with what I would identify as

\begin{itemize}
\item \textsuperscript{347} See Kraus & Raso, \textit{supra} note 14, at 12 (discussing efficiency and competition as broad concepts with many dimensions).
\item \textsuperscript{348} See \textit{id.} at 38 (describing the complex and allocative nature of capital formation as a goal of SEC regulation).
\item \textsuperscript{349} See \textit{supra} note 244 and accompanying text (describing situations where balancing of variables is either impossible or simply not mandated).
\item \textsuperscript{351} See \textit{supra} notes 327–42 and accompanying text (describing the divergent impact of Section 106's factors on different participants in the securities markets). Stating the point differently, it is not difficult to imagine circumstances in which generating \textit{more} of each of Section 106's enumerated factors would not necessarily be \textit{better}.
\item \textsuperscript{352} Cf. Adler, \textit{supra} note 244 (describing generally the problem of incommensurability in cost-benefit analyses); text accompanying note 244 (same).
\end{itemize}
Section 106’s primary function, the enumerated variables have something of a complementary quality to them. Rather than a balancing of costs and benefits, thus, Section 106 is best read to prescribe a continuing duty to advance investor protection, with a now-heightened responsibility to consider the implications of the SEC’s resulting efforts for efficiency, competition, and capital formation in the financial markets.

C. Cost-Benefit Analysis Under Section 106: Obligation, Analysis, and Review

In light of the above findings, what principles might we extrapolate as to the conduct of SEC analysis under Section 106? As to the nature of the SEC’s obligation, to begin, Section 106 is properly understood to impose a duty on the SEC to conduct cost-benefit analysis—though its mandate is of a procedural, rather than substantive, nature. The analysis Section 106 mandates, meanwhile, should be rigorous in nature—particularly in attending to distributional concerns—but need not be a distinctly quantitative exercise, let alone one that seeks to rigidly balance costs against benefits. Perhaps contrary to the conventional wisdom, finally, some scope of judicial review, albeit of a highly deferential nature, is appropriate under Section 106.

Before turning to each of the foregoing, however, we might begin by asking whether the ultimate lesson to be taken from the above is not that cost-benefit analysis has no place in the work of the SEC. One could argue that Congress never intended Section 106 to function as any kind of cost-benefit analysis at all. The language of Section 106, on the other hand, has something of that spirit to it. That spirit is affirmed by its legislative history. And as applied by the SEC and

353 See supra notes 295-309 and accompanying text (identifying Section 106’s primary function as supplementing relevant factors for the SEC to consider, in addition to investor protection).


356 See supra notes 81–86 and accompanying text (describing indications in the legislative history that Section 106 requires some cost-benefit analysis).
evaluated by the courts, it has been treated as a cost-benefit provision.357

More important, then, may be the question of whether—regardless of Congress's intent, the approach of the SEC, or the mindset of the courts—the provision ought to be evaluated, applied, and reviewed as a form of cost-benefit analysis. If one adopts the traditional conception of cost-benefit analysis as simply a tool of efficiency, it should not be. This is minimally suggested by the text of Section 106 itself.358 More fundamental, however, is the disconnect between the analysis prescribed by the provision and the kind that would be necessary for a truly efficiency-enhancing evaluation of the SEC's regulatory choices. The indeterminate nature of the factors to be considered; the lack of any requirement to reach a conclusion, let alone to act on it; and the absence of any strong balancing function among Section 106's enumerated factors all counsel against an understanding of Section 106 as primarily designed to increase efficiency, whether generally or even in the more refined sense of encouraging optimal outcomes.

But this approach involves too narrow a conception of the nature and role of cost-benefit analysis. As suggested above, cost-benefit analysis may serve a variety of functions beyond the promotion of efficiency.359 In certain circumstances, cost-benefit analysis may serve simply to force an agency to consider additional factors—and perhaps particularly factors in some tension with the agency's primary charge. The SEC's required consideration of efficiency, competition, and capital formation under Section 106, then, may constitute cost-benefit analysis of a particular sort.

If that is so, what can we extrapolate from the foregoing as to the application of Section 106 in practice, and as to the scope of any ensuing review? In turn, we must define the nature of the SEC's obligation under the provision, the nature of the analysis it should be expected to conduct, and the nature of any subsequent review.

1. The Nature of the SEC's Obligation

There can be little doubt that Section 106 imposes some obligation on the SEC. In light of the language of Section 106, its purpose, and the nature of the variables it enumerates, however, that obligation

357 See supra notes 90-91, 114 and accompanying text (describing the SEC's and the D.C. Circuit's treatment of Section 106 as a form of cost-benefit analysis).
358 See National Securities Markets Improvement Act of 1996 § 106.
359 See supra Part II.B (exploring nonefficiency functions of cost-benefit analysis).
is properly understood to be limited. More precisely, it is procedural rather than substantive in nature.360

Under Section 106, thus, the SEC must carefully consider the impact of its proposed rules on market efficiency, competition, and capital formation. It may further be required to report its findings in that regard—though that is already less clear from the statute. In any case, it need not go beyond these procedural duties, to reach any substantive conclusion as to the trade-off between investor protection and efficiency, competition, and capital formation.361 Even more clearly, Section 106 does not require that the substance of an SEC rulemaking comport with its findings under that provision.362

The SEC's purely procedural obligation under Section 106 is suggested by the very language of the provision. All that Section 106 requires of the SEC is that it "consider" the impact of proposed rules on efficiency, competition, and capital formation.363 That this narrow mandate was a product of intelligent design might be divined from Congress's reference—earlier in the same sentence—to cases in which the SEC is required to "consider or determine" the consistency of a proposed rule with the public interest.364 Similarly telling is the legislative history of the NSMIA, which included an earlier iteration of Section 106 that required the SEC to "consider or determine" the

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360 See Johnston, supra note 15, at 1351–52 (contrasting substantive and procedural cost-benefit statutes); see also Kraus & Raso, supra note 14, at 9, 13 (arguing that the language of Section 106 suggests a procedural rather than substantive requirement). Notably, where cost-benefit mandates are substantive rather than procedural in nature, they have been quite clear about their scope. See Rose & Walker, supra note 34, at 4 (stating that Executive Order 12,291's mandate that "[r]egulatory action shall not be undertaken unless the potential benefits to society for the regulation outweigh the potential costs to society" was clearly not merely procedural (quoting Exec. Order No. 12,291, 3 C.F.R. 127, 127 (1981))).


362 See Johnston, supra note 15, at 1351–52 (contrasting procedural cost-benefit statutes with substantive cost-benefit statutes that require agencies to base their actions on their findings). It goes without saying that it would be difficult to conclude that the SEC is not obliged to reach any conclusion as to the impact of its rulemaking on efficiency, competition, and capital formation, but that it is required to comply with some such conclusion.


364 Id. (emphasis added).
implications of its rulemaking for efficiency, competition, and capital formation.365

Other factors also favor a procedural interpretation of Section 106. To begin, the suggested function of Section 106—to enumerate factors for SEC consideration—resonates more with a procedural than a substantive reading of the statute. Section 106—a single sentence buried in a statute directed to other matters—would seem a peculiar way to alter the substantive mandate of the Commission.367 The complexity and distributional concerns that arise under Section 106 have similar implications.368 While the SEC might reasonably be expected to engage questions of efficiency, competition, and capital formation, the complexity of the resulting analysis—and the significant distributional questions attendant to weighing those factors alongside the pursuit of investor protection—counsel against an expectation that Section 106 will dictate the nature of SEC rulemaking.

A further note is also in order: Whatever the obligation of the SEC to consider Section 106's enumerated factors, it is not difficult to imagine cases in which the effectuation of those findings would be ill-advised. In particular, the greater the extent of any distributional concerns, the more likely this is to be true. One might plausibly extrapolate from this to the conclusion that in some cases cost-benefit analysis should not even be conducted. At a minimum, though, this possibility mandates caution against overstating the scope of the obligation imposed by Section 106.

2. The Nature of the SEC's Analysis

In defining the proper nature of SEC analysis under Section 106, three features might be highlighted: First, any rigid quantification of the variables to be weighed is ill-advised. Second, the SEC should avoid any explicit or implicit attempt to balance the factors

366 See supra notes 295–309 and accompanying text (identifying Section 106's primary function as enumerating factors for SEC consideration).
367 A natural analogy to such an account of Section 106 might be the "supermandates" proposed by regulatory reformers in the 1990s. See Buzbee, supra note 123, at 306 (describing legislation that proposed to supersede all agencies' decisionmaking criteria with a requirement of cost-benefit analysis); see also Am. Bar Ass'n, Section of Admin. Law & Regulatory Practice, Comments on H.R. 3010, the Regulatory Accountability Act of 2011, 64 ADMIN. L. REV. AM. U. 624, 639–43 (2012) (critiquing similar recent proposals).
368 See supra Part IV.B.3 (describing the complexity and distributional issues that surround Section 106's factors).
enumerated. Finally, analysis under Section 106 should be crafted to give careful attention to the distributional dynamics at work.

By contrast with the practice of cost-benefit analysis in many other settings, Section 106 should not be understood to demand a formal quantification of relevant costs and benefits. The benefits of quantification in appropriate settings go without saying. As often as not, it may be precisely the reduction of the regulatory analysis to hard numbers that ensures that cost-benefit framework serves its intended function.

Several factors cut against such quantification, however, in the context of Section 106. This begins with the provision’s lack of any explicit reference to “costs” or “benefits.” More generally, though, Section 106 is ill-suited to efforts at quantification. Both the indeterminate nature of its enumerated factors and their complexity undercut the possibility of their reduction to meaningful numerical values. The multiplicity of variables only adds to this difficulty.

In addition to presenting significant challenges, quantification is less relevant to an analysis under Section 106. To begin, the operative cost-benefit analysis here is not directed to the realm of risk regulation. Given as much, the traditional preference for quantification—well grounded in that sphere—may be relatively inapplicable under Section 106. More modestly, one might claim greater room for distinct approaches to cost-benefit analysis under Section 106 given the new territory it encompasses.

But the lesser relevance of quantification rests most heavily on the distinct function of cost-benefit analysis under Section 106. Whatever the precise parameters of Section 106’s purpose, the reduction of cognitive biases and the facilitation of agency monitoring are particularly difficult to reconcile with the context and nature of the provision. Yet it is as to those functions that quantification is at the acme of its importance. Any reduction to precise quanta of the SEC’s


371 See supra Part IV.B.4 (describing the difficulty of capturing and balancing Section 106’s many variables).

372 See supra Parts II.A.2 (exploring the reduction of cognitive biases as a function of cost-benefit analysis) & II.B.4 (exploring agency monitoring as a function of cost-benefit analysis).
weighing of efficiency, competition, and capital formation, by contrast, would generate limited additional value.\textsuperscript{373}

The poor fit of a balancing approach to Section 106 likewise starts with the language itself. The statute does not, of course, speak of costs and benefits. More importantly, it does not juxtapose "protection of investors" and "efficiency, competition, and capital formation" in a way that would suggest a balancing of one against the other.\textsuperscript{374} Rather, the new factors are to be considered "in addition to" investor protection.\textsuperscript{375}

Regardless of the language, balancing among these variables is not readily accomplished. As noted above, investor protection may variously be efficient or inefficient.\textsuperscript{376} The same might be said of competition and capital formation. Competition may sometimes enhance investor protection, meanwhile, while undercutting it at others. The tendency of each of the factors to favor certain categories of market participants—at least in select circumstances—offers a further caution against any attempt at balancing.\textsuperscript{377} Such distributional impacts make choices among the factors even more freighted.

This points to a final feature of cost-benefit analysis under Section 106 that can be derived from the foregoing. As suggested above, both the ex ante equilibrium against which proposed SEC rules are directed and Section 106's analysis of those rules have strong distributional characteristics.\textsuperscript{378} Any cost-benefit analysis under Section 106 must attend to the latter. The evaluation of relevant costs and benefits in these circumstances may necessitate appropriate discounts,

\textsuperscript{373} Recent internal guidance from the SEC's Office of General Counsel, tracking the position of the Office of Management and Budget, argues for just such immersion in quantitative analysis by the Commission's rulemaking divisions. \textit{See} \textit{Current Guidance}, \textit{supra} note 69, at 7, 9–10, 12–14 (emphasizing the importance of using quantitative analysis to support rulemaking). As acknowledged above, such quantitative precision has undoubted value, in appropriate cases. The institutionalization of a more quantitative approach—with the creation of the Division of Risk, Strategy, and Financial Innovation in September 2009—is similarly well advised. \textit{Cf.} Henry T. C. Hu, \textit{Too Complex to Depict? Innovation, "Pure Information," and the SEC Disclosure Paradigm}, 90 \textit{Tex. L. Rev.} 1601, 1682–83 (2012) (describing the Division of Risk, Strategy, and Financial Innovation's focus on interdisciplinary analysis); Kraus \& Raso, \textit{supra} note 14, at 30–32 (describing the new division). For the reasons enumerated above, however, I would argue that the guidance document seeks to press the Commission too far down that path.

\textsuperscript{374} \textit{See} National Securities Markets Improvement Act of 1996 § 106.

\textsuperscript{375} \textit{Id.}

\textsuperscript{376} \textit{See supra} notes 337–42 and accompanying text (describing the differential impact of efficiency on different types of investors).

\textsuperscript{377} \textit{See supra} notes 327–42 and accompanying text (detailing the different consequences of the Section 106 factors for different types of investors).

\textsuperscript{378} \textit{See supra} Part IV.B.3 (discussing the distributional implications of SEC regulation and Section 106's factors).
for example, to address distortions associated with the uneven distribution of assets and/or information. Improvements in investor protection or capital formation need to be carefully weighed, meanwhile, in light of their skewed distribution to retail investors and sophisticated investors, respectively. Beyond such caution, the distributional characteristics in certain settings may counsel against any use of cost-benefit analysis at all. At a minimum, however, their presence discourages the rigid or unvarying use of cost-benefit analysis under Section 106.

3. The Nature of Review

Beyond the SEC's own conduct of cost-benefit analysis under Section 106, what insights can the foregoing offer, as to the nature of any ensuing review? In certain settings, as Eric Posner has suggested, cost-benefit analysis is best subjected to political rather than legal constraint.\(^{379}\) Section 106 is among those settings.

Again, the statutory text counsels this result. Mere "consideration" lends itself less naturally to judicial review than to political accountability.\(^{380}\) The indeterminate nature of the factors to be considered points to the same conclusion, as does the inability to simply balance them out.\(^{381}\) A certain awkward quality to the D.C. Circuit's decisions under Section 106 might be seen to reflect as much.\(^{382}\) Simply put, consistent and coherent legal standards for review of the SEC's generalized weighing of investor protection, efficiency, competition, and capital formation may be impossible to imagine.

The distributional character of any conclusions reached under Section 106 likewise favors a more political approach to their review.\(^{383}\) Such distributive choices are necessarily political in nature, and hence best policed by the political branches, rather than the

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\(^{379}\) See Posner, supra note 40, at 1187-90 (describing cost-benefit analysis as a tool of political accountability). Notably, one might see some indication of this in the SEC's voluntary conduct of more traditional cost-benefit analysis, dating back to the 1970s. Posner thus suggests that, in light of the political functions of cost-benefit analysis in certain circumstances, agencies may engage in it voluntarily. Id. at 1159-60.

\(^{380}\) Cf. supra note 77 and accompanying text (noting that Section 106 only requires the SEC to "consider" the enumerated factors (quoting the National Securities Markets Improvement Act § 106)).

\(^{381}\) See supra notes 327-42 (describing the complexity and distributional consequences of the Section 106 factors), 349-53 (explaining the difficulty of balancing Section 106's factors) and accompanying text.

\(^{382}\) See supra notes 112-16 and accompanying text (describing the analytical tension within the D.C. Circuit's decisions on Section 106).

\(^{383}\) See supra notes 327-42 and accompanying text (describing the distributional impacts of Section 106's factors).
This approach may permit greater flexibility in attempting to address any distributional difficulties that arise. More substantively, the inherently political nature of distributional choices may counsel political constraints as a matter of democratic accountability.

To be sure, the institutional context of Section 106 demands caution in any preference for political over judicial review. Especially as exercised under the auspices of OIRA, political review has seemed to entail something more than a generalized assessment by the political branches. It has involved, thus, a greater degree of political intervention than would commonly be seen as appropriate in the context of independent agency rulemaking. An orientation to political review might not, therefore, be properly reduced to heightened OIRA review.

Given the mandatory nature of the SEC's consideration of efficiency, competition, and capital formation, furthermore, some degree of judicial review is likely justified under Section 106. If nothing else, the indisputable flaws in the SEC's analysis of Rule 14a-11 counsel as much. This position should not be taken lightly, however, and may not hold true in many settings of cost-benefit analysis. To the contrary, in fact, a number of the most important cost-benefit mandates—those imposed under the UMRA and by President Reagan and his successors by executive order—are nonjusticiable by their own terms. By virtue of their general applicability and distinct functions,

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384 See David A. Strauss, Is Carolene Products Obsolete?, 2010 U. ILL. L. REV. 1251, 1259 (arguing that decisions about distributive justice should be made by the political branches).

385 See id. The functions of cost-benefit analysis under Section 106 suggested above might likewise favor political review. See supra Part IV.A (discussing the functions of cost-benefit analysis under Section 106). If the provision is primarily directed to SEC consideration of Congress's enumerated factors, and secondarily to limiting the extent of regulation and to some loose promotion of efficiency—all political functions to a significant degree—legal review may be that much less appropriate. Finally, the limited role of judicial review in regulating the SEC generally might be seen to lend further support to a focus on political review. See supra notes 92-93 and accompanying text (describing the SEC's historical insulation from judicial review).


387 It is telling, in this regard, that important elements of the SEC's analysis of shareholder proxy access under Section 106 were flawed. See Mongone, supra note 16, at 774 (identifying SEC conclusions that were insufficiently supported by the evidence).

388 See supra notes 105-08 and accompanying text (detailing the inadequacies of the SEC's analysis of Rule 14a-11).

however, those provisions should not be analogized to Section 106. Limited as Section 106’s mandate may be, it is no less of a mandate for that.390

Judicial review under Section 106 should be circumspect, however, and highly deferential.391 Such deference is consistent with the traditionally limited judicial constraints on the SEC.392 It is also in line with the Commission’s significant expertise and its stature as an independent agency.393 That the obligation to consider efficiency, competition, and capital formation comes by way of legislative initiative rather than executive order—and in legislation directed specifically to the SEC—lends further support to such deference.394 A relatively high degree of deference, finally, is also favored by the complexity and distributional character of SEC analysis under Section 106.395 If courts ever owe deference to administrative agencies, it is when they grapple with the difficult choices and normative decisions that arise in these circumstances.396

A further point concerns the specificity of any judicial evaluation of SEC analysis under Section 106. As written, the broadly worded decision in Business Roundtable significantly empowered the courts

390 It is telling that the Unfunded Mandates Reform Act, adopted only a year before Section 106, included an explicit preclusion of judicial review. 2 U.S.C. § 1571(b)(2).

391 Judicial review of agency action is generally deferential, and especially so when it comes to agencies’ evaluation of relevant costs and benefits. See Nat'l Ass'n of Home Builders v. EPA, 682 F.3d 1032, 1040 (D.C. Cir. 2012) (describing judicial review of cost-benefit analysis as highly deferential); Consumer Elecs. Ass'n v. FCC, 347 F.3d 291, 303 (D.C. Cir. 2003) (same). Given the nature of Section 106—as compared with more standard-form cost-benefit analysis requirements—the relevant standard of deference ought to be even greater.

392 See supra notes 92–93 and accompanying text (explaining traditional deference in judicial review of the SEC).

393 See Rose, supra note 315, at 1412 (the SEC is designed as “a politically insulated, independent agency”).


395 See supra Part IV.B.3 (noting the complexity and distributional consequences associated with Section 106).

396 See JEFFREY S. LUBBERS, A GUIDE TO FEDERAL AGENCY RULEMAKING 328 (3d ed. 1998) (“A reviewing court normally will not substitute its judgment for that of the agency in making factual conclusions so long as the agency’s conclusions have a substantial basis in the record . . . .”); cf. William N. Eskridge & Lauren E. Baer, The Continuum of Deference: Supreme Court Treatment of Agency Statutory Interpretations from Chevron to Hamdan, 96 GEO. L.J. 1083, 1180 (2008) (noting normative decisions and complex technical issues as areas of more limited judicial review of agency interpretations). Whatever judicial review does occur, moreover, should be tailored to the SEC, rather than generic in nature. This approach is suggested both by Section 106’s directive to the SEC particularly, and by the nature of the SEC as something other than the standard risk regulator commonly thought to engage in cost-benefit analysis.
and disempowered the SEC. As to the courts, the decision's lack of a clear standard of analysis left future discretion not in the hands of the agency, where it should be, but instead in the hands of the courts. As David Zaring has pointed out, meanwhile, the imprecise quality of Business Roundtable also limited the ability of the SEC to respond effectively. It could neither discern a clear path of appeal, nor readily fix the problem, given its lack of ready identification.

Needless to say, the D.C. Circuit's approach to Section 106 cannot be reconciled with this approach. Across the Chamber of Commerce, American Equity, and Business Roundtable decisions, the court held the SEC to a standard of cost-benefit analysis that would be high even for a provision that explicitly invoked costs and benefits and was directed to one of the more conventional functions of such analysis—be it the reduction of cognitive bias, agency monitoring, increased transparency, or the promotion of optimal outcomes. Perhaps as a consequence, it failed to appreciate the SEC's more than adequate "consideration" of Congress's enumerated factors for analysis—the function that Section 106 is more properly understood to serve.

Already on the wrong track, the court went on to demand quantification and balancing that are difficult to reconcile with the terms of Section 106, if not directly contrary to its mandate. The court challenged the SEC's conclusions—notwithstanding the absence of any requirement that such conclusions even be offered. And it offered simplistic critiques of the complex calculus that Section 106 requires.

The lessons of Business Roundtable may be as important for cost-benefit analysis generally, however, as they are for Section 106 particularly. In actual application, the form of cost-benefit analysis can be


398 See Zaring, supra note 103 ("There isn't a very clear path for affirmance for the agency, nor is there a 'no way, no how' moment that would make clear that it needs to go to Congress.").

399 See supra note 103 and accompanying text (highlighting surprisingly stringent standard of review imposed in Business Roundtable).

400 See Bus. Roundtable v. SEC, 647 F.3d 1144, 1150 (holding that the SEC "neglected its statutory obligation to assess the economic consequences of its rule" because "it did nothing to estimate and quantify the costs it expected companies to incur").

401 See id. at 1149 (criticizing the SEC's evidence and analysis); Cox & Baucom, supra note 14, at 1839–40.

402 See Bus. Roundtable, 647 F.3d at 1149–52 (analyzing the SEC's consideration of costs and benefits).
expected to vary significantly from one setting to the next. This may hold true even where the identical legislative or executive mandate is imposed on one agency (e.g., an independent, non-risk regulator) versus another (e.g., an executive-branch risk regulator). More importantly, across diverse statutes and regulations, cost-benefit analysis must necessarily take different forms. These forms might be usefully sorted and categorized, whether based on function or the underlying characteristics that stand behind their form. Whatever the case, it is essential to evaluate cost-benefit analyses not against some platonic ideal, but in their particular context. Only when we do so can they be properly judged.

V
TOWARDS A NEW COST-BENEFIT ANALYSIS OF FINANCIAL REGULATION

Beyond the particular setting of SEC rulemaking, what insights might we take away from the above, as to the role of cost-benefit analysis in financial regulation more generally? Without question, there are reasons both to embrace cost-benefit analysis in the design of financial regulation—and to put it aside. It is useful, then, to conclude with a few words about whether the practice of cost-benefit analysis in financial regulation should be embraced or resisted—a question Congress, agencies, and the courts will need to grapple with in the years ahead. Beyond that, we do well to successively consider the functions and forms of cost-benefit analysis in areas of financial regulation beyond Section 106.403

Among the arguments for preserving the relative insulation of financial regulation from cost-benefit analysis, two stand out. The first is the high level of uncertainty associated with financial regulation.404 Markets are complex institutions. Financial markets are especially—and perhaps increasingly—so.405 Part of this complexity lies in the

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403 One might wonder whether Section 23(a)(2) of the Securities Exchange Act, with its charge to the SEC to consider the impact of its rulemaking on competition, might not be the next battleground. Cf. CURRENT GUIDANCE, supra note 69, at 3 (describing the D.C. Circuit's standard of review for Section 23(a)(2) of the Exchange Act). Other possibilities might be identified as well. See id. at 3 n.7 (noting SEC obligations under the Paperwork Reduction Act, the Small Business Regulatory Enforcement Fairness Act of 1996, and the Regulatory Flexibility Act).

404 Cf. Robert W. Hahn & Cass R. Sunstein, A New Executive Order for Improving Federal Regulation? Deeper and Wider Cost-Benefit Analysis, 150 U. PA. L. REV. 1489, 1499 n.37 (2002) ("In a situation of uncertainty, when existing knowledge does not permit regulators to assign probabilities to outcomes, it is exceedingly hard to do cost-benefit analysis.").

405 See Brett McDonnell, Don't Panic! Defending Cowardly Interventions During and After a Financial Crisis, 116 PENN ST. L. REV. 1, 17 (2011) (detailing the increasing com-
heterogeneous range of actors who participate in the financial markets, from distinctly motivated individuals to widely varied institutions.\textsuperscript{406} As complex as the cast of characters on the capital markets are, however, the complex character of modern financial instruments may add even more to the aggregate complexity of the financial markets.\textsuperscript{407} Beyond complexity, the uncertainty of financial regulation is further enhanced by the substantial and perhaps inherent unpredictability of the psychological impulses that undergird market behavior. Especially on the financial markets, such “animal spirits” play a central role.\textsuperscript{408}

Beyond uncertainty, a further argument against the widespread use of cost-benefit analysis in financial regulation is exemplified by Section 106. As evident in the Business Roundtable litigation, cost-benefit analysis in financial regulation holds great potential for abuse. In actual practice, its primary function may be to offer another bite at the apple for interest groups that have tried—but failed—to stymie new regulatory initiatives at the legislative or rulemaking stage.\textsuperscript{409} Rather than a tool for improving regulation, it may amount to little more than a weapon for deregulation.

By way of rejoinder, at least three counter-arguments might be offered: For all the uncertainty and complexity in the financial markets, to begin, the rich body of existing—and constantly accumulating—data on the markets offers the opportunity to engage in meaningful cost-benefit analyses of financial regulation.\textsuperscript{410} This is


\textsuperscript{407} See Schwarz, supra note 406, at 217, 220–22 (illustrating the complexity of mortgage-loan products and securities and how they lead to market failure); see also Zachary J. Gubler, \textit{The Financial Innovation Process: Theory and Application}, 36 DEL. J. CORP. L. 55, 94 (2011) (noting how financial innovation leads to increased complexity in financial instruments); McDonnell, supra note 405, at 17 (arguing that innovation increases market complexity).


\textsuperscript{409} See McGarity, supra note 61, at 531–33 (suggesting that judicial scrutiny of agency cost-benefit analysis can result in manipulation by regulatees).

\textsuperscript{410} But see Kraus & Raso, supra note 14, at 30 (noting significant challenges of data collection regarding SEC and CFTC regulatory initiatives, given their mandate to regulate a variety of new markets); see also Rose & Walker, supra note 34, at 17 (quoting U.S.
especially so, given the diminished challenges of quantification and valuation in financial rulemaking as compared with environmental regulation, workplace safety regulation, and other regulatory fields.411

A meaningful role for cost-benefit analysis in financial regulation is also favored by the high stakes of getting it right. As in other regulatory spheres in which cost-benefit analysis has taken hold, the upside of improved decisionmaking is substantial. And—as the financial crisis made clear—the downside could not be more grave. That downside, moreover, is not limited to the financial markets themselves.412 The relatively broader range of policy alternatives presented in financial regulation—as compared with environmental regulation, for example—might make the stakes even higher in the former than in the latter.

Finally, given the necessary centrality of some efficiency goal in regulating the financial markets, agencies’ use of cost-benefit analysis seems well warranted. As Revesz and Livermore have put it, cost-benefit analysis would seem to be “a requirement of basic rationality” in such a setting.413 Without such analysis, it becomes all but impossible to define, evaluate, or measure success or failure.

Beyond these tailored arguments, cost-benefit analysis should be understood to serve three important functions in financial regulation generally. Most obviously, as with Section 106, cost-benefit analysis may facilitate a more effective balancing of the competing demands of the financial markets.414 A properly designed scheme of financial regulation must address a complex array of actors, with (sometimes widely) varying needs. In this setting, cost-benefit analysis has the potential to play a mediating—if not quite arbitrating—role. Minimally, it may offer a kind of common language, or at least base of discourse, for navigating the complex choices inherent in financial regulation. More substantively, it might be seen as offering a common currency of sorts, with which some rough balance can be sought between competing preferences and demands.

411 See supra Part IV.B.4 (comparing the challenges in securities regulation versus other areas of regulation); see also Rose & Walker, supra note 34, at 18 (analyzing difficulty of quantifying costs and benefits in financial regulation).


413 Revesz & Livermore, supra note 33, at 12.

414 See supra Part IV.A.2 (exploring balance of different priorities of Section 106).
Cost-benefit analysis in financial regulation may also be important in helping to emphasize the non-interest-group basis for agencies' regulatory choices. The financial markets are characterized by sharply divergent regulatory preferences, not only between institutional and retail investors, but—perhaps more importantly—between issuers, investment banks, and institutional investors. Given the consequent high stakes of regulatory decisionmaking, a particularly extensive network of lobbying activity—at all levels of governance—operates around the financial markets. This activity, in turn, has prompted significant concern that interest-group influence may undermine the public interest.

Cost-benefit analysis may be useful in helping to alleviate these concerns. This begins with its enhancement of transparency. Greater visibility into the regulatory process may in and of itself be an important antidote to perceived interest-group influence. But cost-benefit analysis may also do more. It may help to communicate the net social benefit of particular regulatory choices, in ways that reduce perceptions of capture or other regulatory bias. Even further, cost-benefit analysis might reduce interest-group influence in reality. But even if the impact of cost-benefit analysis was limited to perception—perhaps given the inevitable malleability associated with it—it would constitute an important contribution.

Finally, cost-benefit analysis may contribute to financial regulation by helping to reduce cognitive biases against systemic risk particularly, and future harms more generally. In financial regulation, as elsewhere, there is both a psychological and a political tendency toward the over-discounting of systemic risks. As the recent financial crisis made abundantly clear, however, whatever informational efficiencies the financial markets might offer, they do not extend to an appropriate discounting of systemic risks. The cascade effects that originated with the collapse of the U.S. housing market, and radiated outward from there—both geographically and across distinct financial markets—starkly highlighted both the complexity of the capital


417 See id. (noting critics of banks' lobbying influence).

418 See supra Part II.B.3.

419 See supra notes 246–48 and accompanying text (describing cognitive bias against systemic risk in financial markets).

In the aftermath of the financial crisis, of course, a great deal of attention was showered on institutions deemed "too big to fail"\footnote{421}{See Jonathan R. Macey & James P. Holdcroft, Jr., \textit{Failure Is an Option: An Ersatz-Antitrust Approach to Financial Regulation}, 120 YALE L.J. 1368, 1375-85 (2011) (discussing the problems associated with "too big to fail" institutions); Aaron C. Stine & Eric D. Gorman, \textit{Ebbing the Tide of Local Bank Concentration: Granting Sole Authority to the Department of Justice to Review the Competitive Effects of Bank Mergers}, 62 SYRACUSE L. REV. 405, 407 (2012) ("After the financial collapse, the policy and policymakers alike heaped much scorn upon banks that had become 'too big to fail.'").}—among the important sources of systemic risk in the financial markets. Tellingly, though, reform proposals to prevent the emergence of such institutions gained little traction, and the final provisions of the Dodd-Frank Act included only half-measures in that direction.\footnote{422}{See Arthur E. Wilmarth, Jr., \textit{The Dodd-Frank Act: A Flawed and Inadequate Response to the Too-Big-to-Fail Problem}, 89 OR. L. REV. 951, 1053-54 (2011) (arguing that the Dodd-Frank Act did not completely solve the "too big to fail" problem).}

Within little more than a year, issues of systemic risk went from the headlines to the sidelines in the policy discourse. An effective regime of cost-benefit analysis—in which such systemic risk is distinctly identified as a question for evaluation—might help to address this dynamic, in which systemic risks are downplayed for both psychological and political reasons.

If cost-benefit analysis has an important role to play in financial regulation, then, and the foregoing are its core functions, what key characteristics can be understood to follow? Given its suggested purposes, to begin, an effective regime of cost-benefit analysis for financial regulation should integrate a relatively broader range of factors than traditional cost-benefit analysis—in environmental regulation and elsewhere. Minimally, this would imply a receptivity to effects that lie further afield—be they costs or benefits—rather than exclusively those grounded in the same field of inquiry as the operative regulation itself.\footnote{423}{Factors to be evaluated in the cost-benefit analysis of a proposed financial rule might thus include potential environmental impacts of the rule.}

The implicit, if not explicit, preference for quantifiable factors in traditional cost-benefit analysis might likewise be modified for financial regulation.\footnote{424}{\textit{Cf. supra} note 51 (outlining prescribed requirements for cost-benefit analysis).} Finally, factors that are not distinctly costs or benefits might also be expected to play a greater role in cost-benefit analysis in financial regulation. "Investor protection," for
example, is not always of benefit—and may sometimes even be a cost. Yet it is rightly placed at the heart of SEC analysis under Section 106.

Care should be taken that this broadening of cost-benefit analysis in financial regulation does not generate a concomitant loss in rigor, however, given both the significant capacity for quantification and monetization in financial regulation, and the relatively high stakes. Even if less "precise" than traditional cost-benefit analysis, the evaluation of costs and benefits in financial regulation need not reduce to a loose weighing of pros and cons. Cost-benefit analysis in financial regulation should include all the systematic evaluation associated with conventional cost-benefit analysis, but with additional—and broader—factors incorporated into the mix as well. Important strands of the analysis of proposed financial rules, as such, may well be non-quantitative. But that analysis need be no less systematic, including in its enumeration of a precise set of factors for consideration.

Cost-benefit analysis in financial regulation should thus be fairly clear as to the criteria for consideration and evaluation. More specifically, a cost-benefit analysis regime for financial rulemaking should explicitly enumerate the factors of greatest concern—and perhaps greatest difficulty—in the design of effective financial rules. Most importantly, any such analysis should be required to engage questions of systemic risk and the potential distributional impacts of the proposed rule.

Given that systemic risk concerns are among the core arguments for cost-benefit analysis in financial regulation, attention to systemic risks should be mandated clearly in any applicable regime of cost-benefit analysis. As we have seen, distributional concerns also weigh heavily in the design of financial regulation. A regime of cost-benefit analysis for financial rulemaking should thus attend to distributional issues of two sorts: First, of course, variation in the costs or benefits imposed on distinct categories of market actors should be explicitly considered. While Kaldor-Hicks efficient choices may be warranted in certain cases, it is important that such choices be transparent—and that they be engaged directly. At least as important—though perhaps less apparent—are distributional imbalances that will play themselves out over time. In many cases, such imbalances will overlap with issues of systemic risk. Regardless of their precise nature,

425 See supra notes 246–47, 322–23 and accompanying text (discussing systemic risk and the importance of financial regulation in minimizing it).
426 See supra notes 328–42 and accompanying text (noting distributional issues in financial regulation).
427 Cf. Rose-Ackerman, supra note 61, at 344–45 (discussing the difficulty of addressing distributional impacts across generations).
however, a cost-benefit analysis regime for financial regulation should explicitly require engagement with them.

What, then, should be the regulatory expectations associated with a broader, yet still rigorous, cost-benefit analysis regime for financial regulation, in which quantifiable variables do not exclude other (clearly enumerated) factors? As in Section 106, any such analysis should be procedural, rather than substantive, in nature. Especially in the financial markets, with not only their significant complexity, but also their capacity for—if not tendency toward—rapid change, cost-benefit analysis should be a tool, not a straitjacket. Relevant regulators—from the SEC to the Commodity Futures Trading Commission, the Federal Reserve Bank, and others—should be expected to conduct rigorous cost-benefit analysis. But their ultimate regulatory choices should not be limited to the outcomes dictated by that analysis. Where alternative policies meet the requirements of the Administrative Procedure Act and the organic statutes of the relevant agencies, an agency's inability to prove their net utility—or even their apparent inconsistency with the agency's cost-benefit analysis—should not prevent enactment of such policies.

Finally, though, given the concerns with interest group influence that constitute another important reason for cost-benefit analysis in financial regulation, financial regulators' compliance with the procedural obligations of cost-benefit analysis should be subject to meaningful judicial review.428 The D.C. Circuit's decision in Business Roundtable made a mockery of such review,429 but its very nature as an outlier counsels against relying on it to dump the baby out with the bathwater. Until Business Roundtable, courts had successfully navigated the balance between meaningful review of agencies' cost-benefit analyses and the deference dictated by the courts' lack of expertise—as to the substantive rulemaking at stake, and even as to the proper weighting of associated costs and benefits.430 With clear and consistent

428 See supra notes 212–13 and accompanying text (analyzing appropriate scope of judicial review of cost-benefit analysis by independent agencies).

429 By contrast, consider the decision in Investment Co. Institute v. CFTC, 891 F. Supp. 2d 162 (D.D.C. 2012). There, the court rejected the attempt by plaintiffs—notably also represented by Eugene Scalia—"to use the agency's obligation to conduct a cost-benefit analysis to delve impermissibly into agency policy judgments and second-guess the CFTC's conclusion on the outcome of the cost-benefit analysis, all under the rubric of the APA's traditional arbitrary and capricious standard." Id. at 220.

guidance on the appropriate scope of judicial review of cost-benefit analysis—be it from Congress or the Supreme Court—this balance can be expected to remain the norm. And with such a balance, judicial review of financial regulators' procedural obligations in cost-benefit analysis will remain an important feature of an effective regime.

CONCLUSION

Rather than shying away from the true nature of Section 106 and the D.C. Circuit's invocation of it to derail the SEC's long drive to empower shareholders, the foregoing attempts to engage the provision for what it is. Without question, the Business Roundtable decision was a striking decision as a matter of modern-day administrative law. It is difficult (if not impossible) to reconcile it with the Supreme Court's standard—most prominently articulated in Motor Vehicles Manufacturers Association v. State Farm Mutual Insurance—for arbitrary and capricious review of agency action.\textsuperscript{431} For that very reason, though, the decision's implications for administrative law might plausibly be seen as limited.

A different conclusion is suggested, however, when we understand Section 106 and Business Roundtable as pointing to new—and highly distinct—conceptions of the nature of cost-benefit analysis. On this count, their potential implications are likely to be great. And as such, they require our close attention.

Most immediately, a clearer understanding of Section 106 and the Business Roundtable decision is crucial, given the implications they may hold for implementation of the many requirements of the Dodd-Frank Act—including rulemaking on the Volcker Rule, on securitization, and on derivatives trading.\textsuperscript{432} In offering a narrowly defined conception of Section 106, thus, the foregoing constitutes an important antidote to the fear that that provision might put a stop to the regulatory reforms that Congress dictated in response to the global financial crisis.\textsuperscript{433}

The lessons to be learned from Section 106's extension of cost-benefit analysis to financial regulation, however, do not stop there. As the reach of cost-benefit analysis continues to expand, the analysis herein offers a framework for understanding its distinct functions and

\textsuperscript{431} 463 U.S. 29, 43 (1983).
\textsuperscript{432} See Coffee, supra note 32, at 1067 (discussing the possible impact of Business Roundtable on future rules).
\textsuperscript{433} In a sense, the analysis herein offers a framework for the SEC to do what David Arkush has advised in a work-in-progress: Take the lead in defining the appropriate form of cost-benefit analysis in securities regulation, and define it—for not only themselves, but the courts as well. See Arkush, supra note 33, at 3.
potential forms, both in financial regulation and beyond. Cost-benefit analysis may be a useful tool across the length and breadth of the modern administrative state. If its utility is to be realized, however, the rote invocation of "efficiency" as its purpose—and of a single method of analysis as its form—must be abandoned. Rather, we must embrace a more open conception of the diversity of approaches cost-benefit analysis may encompass. The discourse of cost-benefit analysis, in turn, must more consistently and systematically attend to its function—and appropriate form—in any given case.\footnote{The benefits of recognizing a broader universe of potential functions and forms of cost-benefit analysis may be quite far-reaching. Consider, for example, the U.S. negotiations with the European Union to establish what would be the largest trading bloc in the world. Among the key concerns of the Europeans, it turns out, has been the prospect that a rigid species of cost-benefit analysis would be applied to European regulatory initiatives. See Steven Erlanger, Conflicting Goals Complicate an Effort to Forge a Trans-Atlantic Trade Deal, N.Y. Times, June 13, 2013, at B1.}

At the broadest level, finally, the foregoing helps to shed light on the appropriate scope of courts' review of agencies' cost-benefit analyses—and, in turn, on the nature of judicial review generally. For the full promise of cost-benefit analysis to be realized, so too must its limits—including the limits on its review. Cost-benefit analysis has advanced a great distance over the century of its application in U.S. law. As that march continues, regulators and judges alike will need to engage more fully with its appropriate nature and proper use.