Written Statement for Cost-Benefit Analysis Symposium Consumer Financial Protection Bureau July 29, 2020

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Thank you for the opportunity to participate in today's symposium on Cost Benefit Analysis.

My remarks today draw heavily from a recent article that I coauthored with Paul Rothstein, a senior economist with the Consumer Financial Protection Bureau.¹ For that paper, we undertook a survey of seventy-two consumer protection regulations that included cost benefit analyses and reported on the content and quality of the analysis with particular attention on the analyses of consumer benefits. Nineteen of the regulations included in our sample were CFPB rulemakings, with the balance from other independent agencies or executive agencies. Drawing on prior work exploring the theoretical goals of consumer financial protection regulation,² we examined the extent to which the cost benefit analyses in our sample addressed specific market failures. We also attempted to assess-through both quantitative and qualitative reviews-the quality of the analyses undertaken. Our article concluded with a set of recommendations for improving the quality of CBA in the future, several of which I discuss in this statement. While our paper documented a number of limitations in the manner in which benefit analyses for consumer protection regulations have been undertaken in recent years, our research did identify the principal market failures consumer protection regulations attempt to address and suggested a number of ways in which these analyses might be refined and improved. Our research also documented the extent to which legal requirements-including the CFPB's obligations under section 1022(b) of the Dodd-Frank Act—serve to enhance the thoroughness of cost benefit analyses.

I turn now to the five issues that our panel has been asked to address.

¹ Howell E. Jackson & Paul Rothstein, *Benefit Analysis in Consumer Protection Regulation*, 9 HARV. BUS. L. REV. 101 (2019). A reduced version of that paper is attached as an appendix to my remarks. The full text of the article is available at <u>https://papers.csm?abstract_id=3659474</u>.

² See John C. Campbell, Howell E. Jackson. Brigitte Madrian, and Peter Tufano, *Consumer Financial Protection*, 25 J. ECON. PERSPECTIVES 91-114 (2011). See also John C. Campbell, Howell E. Jackson. Brigitte Madrian, and Peter Tufano, *Making Financial Markets Work for Consumers:* An Open Letter to America's First Consumer Financial Protection Czar, HARV. BUS. REV., July-August, 2011, at 47-54.

1. Usefulness of cost-benefit analysis in general in policy development. In your experience or research, does cost-benefit analysis contribute effectively to policy development in consumer protection or financial regulation? For example, does cost-benefit analysis help focus the conversation and provide transparency? Or does it narrow the discussion and exclude important issues?

In my mind, there is no doubt that serious and disciplined cost benefit analysis can enhance the quality of policy development in consumer protection and financial regulation. Whenever agency leadership embarks upon a new regulatory initiative, there is at least an intuitive form of cost benefit analysis at work, if only an assumption that the proposed initiative will do more good than harm. Structured cost-benefit analysis helps discipline those intuitions by requiring proponents of the initiative to articulate with greater precision the harm—often a market failure to be corrected, the gains to be obtained from the correction, expected costs (both public and private) of taking the action, and likely efficacy and durability of proposed interventions. At a minimum, a culture of cost-benefit analysis requires these considerations to be explored qualitatively (or conceptually in the words of my colleague John Coates) and in certain circumstances it may be possible to quantify or even monetize some of the more significant components of the analysis.

To be sure, cost benefit analysis—like analysis of any sort—can be done badly and employed disruptively. In our recently published article, my co-author and I discovered that some regulations purportedly address a half a dozen or more different market failures, giving the work a bit of a throw-in-the-kitchen-sink flavor. In addition, as a general matter, the quantification of benefits is more difficult and less complete than the quantification of costs. The latter are often directly imposed and readily estimated by industry participants, often with a price tag attached. Consumer benefits are more difficult to estimate and consumer groups, to the extent that they participate in the rulemaking process, are less likely to contribute quantified or monetized estimates. While some take the view that this asymmetry renders cost-benefit analysis unhelpful to policy making, my own view is that regulatory agencies, such as the CFPB, simply need to adapt the manner in which they employ cost benefit analysis to take into account structural challenges. As explained below, there are ways in which the Bureau could promote the development of better measures of consumer benefits in advance of rulemaking efforts so as to address and to mitigate current limits regarding benefits analysis.

2. Cost-benefit analysis and Bureau structure. The Division of Research, Markets and Regulations provides the staff for most rulemaking teams and also houses the Office of Research. The Office of Research is accountable for the cost-benefit analysis of rules. In your experience or research, what are the strengths and weaknesses of this structure? Do you expect it to facilitate high-quality cost-benefit analysis that informs leadership and the public and advances policy development?

In general, I have been impressed with the structure of the Division of Research, Markets, and Regulations. Locating economists, lawyers, and market specialists alongside of each other has, in my view, improved the quality of cost-benefit analysis at the CFPB. Certainly, this structure has infused a cost-benefit sensibility earlier in the rulemaking process than one observes at other agencies, where the economists (at least traditionally) become involved only after the substantive provisions of the rule have been determined. The only modest reservation that I have about the CFPB's location of its economic talent in the Division of Research, Markets, and Regulations is the distance that it creates between its economists and other parts of the Bureau. No doubt in part as a result of the requirements of section 1022(b), cost benefit analysis at the CFPB focuses on regulations and rulemaking. But enforcement activities and educational policies also impose costs and produce benefits, and the decision of Bureau leadership to pursue a policy goal through enforcement or education rather than regulation often proceeds on an implicit assumption that the alternative approach will be more cost-effective than and comparably beneficial to a rulemaking approach. Extending a more formal CBA sensibility to these decisions could be beneficial and it might be useful to assign economists from the Division of Research, Markets, and Regulations to more rigorously more from time to time alternative approaches to Bureau interventions.

3. *Quantifying and comparing benefits and costs.* Section 1022(b)(2) of Dodd-Frank does not require the Bureau to net expected costs against benefits, or to provide a table of costs and benefits, or to assert that benefits exceed or justify costs; and the Bureau does not generally do so. Further, it is frequently not possible to reliably quantify the costs or benefits of regulatory requirements, although the Bureau's internal policies and procedures state that costs, benefits and impacts should be quantified, "to the extent reasonably feasible and appropriate." In your experience or research, would more informative cost-benefit analysis result if greater quantification were required under specific conditions if not generally? When is quantitative cost-benefit analysis more useful and informative to leadership and the public than partly quantitative or non-quantitative cost-benefit analysis?

Given the practical limitations of developing comprehensive estimates of monetary costs and benefits, I think a pragmatic framework similar to the Bureau's current "to the extent reasonably feasible and appropriate" approach is sensible (and inevitable). Certainly, imposing a mandatory obligation to demonstrate that monetized benefits exceed monetized costs would be unduly restrictive. Such a strict requirement would also inappropriately disregard distributional and equitable considerations that necessarily play into regulatory decisions. That said, there are a few in which Bureau policies regarding cost benefit analysis might be refined. As mentioned earlier, a number of the cost benefit analyses in our survey identified a surprisingly large number of consumer benefits. At a minimum, agencies should identify the one or two key benefits (often market failures) that the regulation in question is designed to assess. In addition, when quantifying benefits, cost benefit analyses in our survey sometimes pointed to quantifiable factors (like time saved) when the clear purpose of the regulatory intervention was to improve consumer choices or reduce the number of instances in which consumers fall into financial distress. To the extent that analyses rely on quantitative measures of secondary effects (like time saved), drafters should explain why they are relying on such measures and acknowledge explicitly more significant benefits (like avoiding financial distress or promoting better consumer decisions), which cannot currently be estimated. In other instances in our survey, we discovered asserted benefits that were based on assumed parameters. As a general matter, I would recommend that agency personnel avoid the use of assumed parameters unless they can introduce some evidence supporting the plausibility of their assumptions. Finally, I think it would be a good discipline—and helpful for external academics—if economists undertaking cost benefit analyses identify areas in which they were unable to determine estimates of parameters that would have been useful in their cost-benefit analyses. This information could encourage academics to take on this work in the hopes that it could be useful in future cost benefit analyses. In this vein, one could imagine the Bureau might maintain a catalog of areas in which future academic work could be helpful and perhaps assist outside research in gaining access to appropriate data sets necessary to undertake such work.

4. Using notice and comment for better cost-benefit analysis of financial regulation. Commenters on proposed Bureau regulations rarely provide detailed comments on the cost-benefit analysis or additional data for use in the cost-benefit analysis. How might the Bureau better use the process of notice and comment to improve the costbenefit analysis of Bureau rules?

I will again respond to this question from the perspective of an academic. In general, I think it is difficult to engage at least academic commentators through notice and comment rulemaking. Occasionally, an academic will have done work on a topic that is directly relevant to a rulemaking's cost benefit analysis and that work can be cited in a comment letter. But, in many instances, personnel at the Bureau will be aware of such work even if it has not yet been published. More commonly, academics will seldom have the flexibility to gear up to do original research within the timeframe of notice-and-comment rulemaking, especially if the notice is published in the midst of the academic calendar. For this reason, as I mentioned in my response to issue three, I think it makes more sense for the Bureau to identify in advance key parameters of interest—like the benefits of reducing financial vulnerability or the value of improved consumer choices with respect to key financial decisions—which might then be employed in a variety of rulemaking contexts.

In a somewhat similar vein, I would recommend to the Bureau an approach that the U.K.'s Financial Conduct Authority attempted several years ago. Rather than starting the regulatory process with notices of proposed rulemaking (or even advanced notices or concept releases), the Bureau should start with market studies of the principal sectors of consumer finance to identify, with as much precision as possible, where markets for consumer financial protections are failing. Identifying the scope and extent of these market failures—or distributional concerns—would both help the Bureau establish priorities and also provide a forum in which to engage both academics

and industry participants. At this stage, one might also sensibly identify the parameters necessary to assess the benefits of regulatory interventions and possibly also have a conversation as to whether regulation or enforcement or education was the most appropriate intervention to address issues of concern. The time frame for work of this sort differs considerably from notice and comment rulemaking, but may well be more productive over the long run.

5. Role of retrospective review of the effects of rules in cost-benefit analysis of subsequent rules. Pursuant to Dodd-Frank Section 1022(d), the Bureau has conducted three retrospective reviews of the effects of significant Bureau rules and is in the process of conducting a fourth. Two of these reviews have already contributed to the amendment of rules subject to assessment and the cost-benefit analysis of those amendments. In your experience or research, how might the Bureau best use retrospective review—whether pursuant to Section 1022(d) or discretionary—to improve its practice of (ex ante) cost-benefit analysis? Should the Bureau seek to identify and explain significant discrepancies between predicted effects and actual effects?

Retrospective reviews are, I think, an admirable innovation and I have been delighted to see the progress that the Bureau has made in this area. I have only a few modest suggestions for improvements and refinements. First, at the front end, I think it would be helpful if the Bureau's original cost benefit analyses were more explicitly about their assessment of the likely impact of the rulemaking on market participants and consumer decisions five years in the future. The analysis should also specify their understanding of the base case against which the rulemaking's effect should be measured. In my experience, projections of this sort were largely absent from the Bureau's rulemakings and (as far as I have been able to determine) have not generally been available in the retrospective reviews done to date. Second, I would recommend that the Bureau consider whether major rulemakings are the right unit of observation for retrospective reviews. Often times, a number of rulemakings will address a particular area of consumer activity (like mortgages) and, in these circumstances, it might make sense to conduct the retrospective review around a series of rulemakings, especially if their effects likely overlap. Of course, in some areas, enforcement activities and educational initiatives will overlap with rulemakings, so an even broader lens could be appropriate. Finally, to revert to my suggestion earlier that the Bureau initiate some market studies to identify market failures or distributional concerns, those market studies might themselves serve as a baseline from which to conduct retrospective reviews on a periodic basis (such as every five or ten years).

THE ANALYSIS OF BENEFITS IN CONSUMER PROTECTION REGULATIONS

HOWELL E. JACKSON & PAUL ROTHSTEIN*

Over the past decade, cost-benefit analysis in the field of financial regulation ("financial CBA") has emerged as a topic of intense public interest. In reviewing rulemakings under the Administrative Procedure Act, courts have demanded greater rigor in the financial CBA that regulators provide in support of new regulations. Industry experts and other analysts have repeatedly questioned the adequacy of agency assessments of costs and benefits. And legal academics have engaged in a robust dialogue over the merits of financial CBA and the value of alternative institutional structures for overseeing financial CBA.

This Article adds to the expanding literature on financial CBA by offering a detailed study of how regulatory agencies actually undertake benefit analysis in promulgating new regulations involving matters of consumer finance and other analogous areas of consumer protection. After a brief literature review, the Article proposes a taxonomy for categorizing benefit analysis in the area of consumer financial regulation. This taxonomy reflects traditional market failures, cognitive limitations of consumers, as well as several other beneficial outcomes commonly associated with regulations designed to protect consumers. Taking the taxonomy as a framework, the Article then reports on a detailed survey of seventy-two consumer protection regulations adopted in recent years, and presents an overview of the range and quality of benefit analysis that government officials actually undertook in the surveyed regulations. The Article next provides a more detailed discussion of twenty "exemplars" of benefit analysis drawn from regulations in the sample and focusing on the strengths and weaknesses of what might be considered state-of-the-art benefit analysis in consumer protection regulation in the years immediately following the enactment of the Dodd-Frank Act. The Article concludes with a discussion of potential lines of academic research and institutional reform that might assist financial regulators in conducting more complete benefit analysis for consumer protection regulation in the future.

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INTRODUCTION

In this Article, we present a survey of the benefit analysis in seventytwo recent consumer protection regulations. We proceed on the assumption that there is value in organizing the study of benefit analysis around the specific types of benefits that consumer finance regulations and analogous forms of regulation are intended to provide. In particular, we assume that it is useful to sort benefit analysis into separate categories of market failures, limitations in consumer decision-making, and other justifications for regulatory action and then to compare how different agencies undertake benefit analysis in each of these separate categories.

In designing our study, we adapt a taxonomy introduced in a pair of articles on consumer financial protection in 2011.¹ These articles identified seven theoretical justifications for the regulation of consumer finance, including considerations that track traditional neoclassical economics (information failures, market power, public goods, negative externalities), limitations in consumer behavior associated with behavioral economics (cognitive biases and limited financial capabilities), as well as a more openended category of fairness, which embraces distributional concerns.² In the course of our review of actual rulemakings, we expanded these seven original justifications to include six additional justifications for regulatory action that our investigations reveal routinely appear in benefit analysis. These additional justifications relate to principal-agent issues, international cooperation, clarification of legal standards to reduce litigation-enforcement costs, and improved compliance or self-regulation, as well as two more amorphous categories of benefits (consumer welfare and market efficiency). Taken together, these thirteen categories of benefit analysis provide the foundation of our analysis.

Over the course of the 2013–14 academic year, we engaged a team of more than a dozen research assistants at Harvard Law School to review in detail a sample of seventy-two recent rulemakings involving consumer finance or in contexts that present analogous challenges to consumer decisionmaking or welfare. Nineteen of the rulemakings are from the Consumer Financial Protection Bureau (CFPB); fifteen are from independent agencies (including the Commodities and Futures Trading Commission (CTFC), the Security and Exchange Commission (SEC), and the Consumer Products Safety Commission (CPSC)), and fifty-six are from agencies subject to Of-

¹ See John Campbell, Howell E. Jackson, Brigitte Madrian & Peter Tufano, Consumer Financial Protection, 25 J. ECON. PERSPECTIVES 91–114 (2011) [hereinafter Campbell et al., Consumer Financial Protection]; John Y. Campbell, Howell E. Jackson, Brigitte Madrian & Peter Tufano, Making Financial Markets Work for Consumers: An Open Letter to America's First Consumer Financial Protection Czar, HARV. BUS. REV. 47–54 (July–August 2011) [hereinafter Campbell et al., Making Financial Makers Work for Consumers].

² Campbell et al., *Consumer Financial Protection, supra* note 1, at 92–96; Campbell et al., *Making Financial Makers Work for Consumers, supra* note 1, 93–95.

fice of Management and Budget (OMB) review under Executive Orders 12866 and 13563³ (including the Department of Labor (DOL), the Department of Health and Human Services (HHS), and the Food and Drug Administration (FDA)). In creating the sample—especially the large number of regulations subject to OMB review—we attempted to select regulations that addressed regulatory problems that were roughly analogous to the kinds of regulatory problems that the CFPB and other agencies with a consumer protection mandate face in their rulemakings.⁴

This Article consists of five Parts. Part I locates the paper within the existing academic literatures on cost-benefit analysis in financial regulation and regulatory impact analysis more generally. Part II describes our survey design: explaining how our sample of regulations was constructed, the procedures we followed in developing our taxonomy for categorizing benefits, the guidelines under which our research assistants were instructed to evaluate and code each regulation, and the procedures we followed for resolving differences of opinion in coding across different research assistants. Part III reports on the aggregate results of our survey, including various statistics about the incidence and intensity of benefit analysis across our entire sample and selected subsamples. Here we highlight a number of differences in benefit analysis across different types of agencies and different legal contexts. We also explore the extent to which certain kinds of benefit analysis are correlated with other categories of benefit analysis. Part IV offers a more qualitative assessment of the benefit analysis in our sample, focusing on lessons learned from twenty "exemplars" of benefit analysis across ten different benefit types. The exemplars discussed in this section were selected from surveyed rulemakings that our research assistants identified as scoring high on either qualitative or quantitative measures of benefit analysis. Together these exemplars could be said to represent the state of the art of benefit analysis for consumer finance and other analogous areas of regulation in the United States.⁵ Part V concludes with some preliminary thoughts on fruitful lines for further academic research and institutional reforms to improve the quality of benefit analysis for consumer financial protection regulations in the future

I. REVIEW OF LITERATURES

We begin with an attempt to locate this Article within the very large and ever-expanding literature on regulatory impact analysis. We first review

³ Exec. Order No. 13,563, 76 Fed. Reg. 3,821 (Jan. 18, 2011); Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Sept. 30, 1993).

⁴ A complete list of the seventy-two regulations included in our survey is attached as Appendix One.

⁵ A more detailed discussion of these exemplars appears in an unpublished Appendix Three, which is available on-line at https://www.hblr.org/wp-content/uploads/sites/18/2019/12/ Jackson_Appendix-Three.pdf.

recent scholarship on cost-benefit analysis in the specific context of financial regulation ("financial CBA") and then consider relevant elements of the broader and more established literature on regulatory impact analysis.

A. Recent Scholarship on Cost-Benefit Analysis in Financial Regulation

At least within the United States, public officials and scholars of policy analysis paid relatively little attention to financial CBA before 2010.⁶ One reason for this inattention was the fact that many financial regulators enjoyed independent agency status⁷ and their regulations were therefore not

⁶ See, e.g., Edward Sherwin, *The Cost-Benefit Analysis of Financial Regulation: Lessons from the SEC's Stalled Mutual Fund Reform Effort*, 12 STAN. J.L. BUS. & FIN. 1, 4 (2006) ("Administrative law scholars engaged in the study of CBA are rarely experts on financial regulation, and vice versa, and there has been little cross-pollination between the two disciplines. Moreover... financial regulators who shun the use of CBA provide scholars with little to study.").

⁷ Although OIRA has never formally required independent agencies to conduct cost-benefit analysis in their rulemakings, the office has over the years nonetheless encouraged independent agencies to provide some discussion of the costs and benefits of new rules and to review the costs and benefits of existing rules. See also Memorandum from Cass R. Sunstein, Adm'r of Office of Info. and Regulatory Affairs, to the Heads of Exec. Departments and Agencies, and of Independent Reg. Agencies (Feb. 2, 2011) ("Executive Order 13563 does not apply to independent agencies, but such agencies are encouraged to give consideration to all of its provisions, consistent with their legal authority. In particular, such agencies are encouraged to consider undertaking, on a voluntary basis, retrospective analysis of existing rules."); Sherwin, supra note 6, at 8-12 (discussing the history of presidential administrations' efforts to encourage independent agencies to adopt cost-benefit analysis requirements, including a letter sent by the Reagan administration asking independent agencies to comply with the cost-benefit requirements in Executive Order 12,291); compare Exec. Order No. 12,291, 46 Fed. Reg. 13,193, §§ 1(d), 2(b)–(e) (Feb. 17, 1981) (requiring executive agencies to consider costs and benefits in their rulemakings but specifically exempting independent agencies), with Exec. Order No. 13,579, 76 Fed. Reg. 41,587, § 1(c) (July 11, 2011) ("Executive Order 13563 set out general requirements directed to executive agencies concerning public participation, integration, and innovation, flexible approaches, and science. To the extent permitted by law, independent regulatory agencies should comply with these provisions as well.") (emphasis added), Exec. Order No. 13,563, 76 Fed. Reg. 3,821, § 1 (Jan. 18, 2011) (reiterating principles of Executive Order 12866 for executive agencies and adding several new requirements), and Exec. Order No. 12,866, 58 Fed. Reg. 51,735, § 4(c)(1)(B) (Sept. 30, 1993) (requiring that independent agencies submit regulatory plans with a "summary of each planned significant regulatory action including, to the extent possible, alternatives to be considered and preliminary estimates of the anticipated costs and benefits"). Note that the definition of "independent agency" encompasses many of the nation's financial regulators, which may help explain the relatively slow progress of financial cost-benefit analysis. See Paperwork Reduction Act, Pub. L. No. 104-113, § 2, 44 U.S.C. §3502(5) (1995) (amended 2006, 2008, 2010) (" '[I]ndependent regulatory agency'; means the Board of Governors of the Federal Reserve System, the Commodity Futures Trading Commission, the Consumer Product Safety Commission, the Federal Communications Commission, the Federal Deposit Insurance Corporation, the Federal Energy Regulatory Commission, the Federal Housing Finance Board, the Federal Maritime Commission, the Federal Trade Commission, the Interstate Commerce Commission, the Mine Enforcement Safety and Health Review Commission, the National Labor Relations Board, the Nuclear Regulatory Commission, the Occupational Safety and Health Review Commission, the Postal Rate Commission, the Securities and Exchange Commission, and any other similar agency designated by statute as a Federal independent regulatory agency or commission"); see also Sherwin, supra note 6, at 11 ("Among the agencies excluded from OMB oversight were many of the nation's financial regulators: the Board of Governors of the

subject to review by the Office of Information and Regulatory Affairs ("OIRA") housed within the Office of Management and Budget (OMB). But even with respect to executive agencies with responsibility for consumer financial matters—such as the Department of Labor with respect to retirement savings or the Department of Housing and Urban Development with respect to mortgage originations—OIRA did not subject those agencies' proposed regulations to the same degree of scrutiny that it applied to health, safety, and environmental regulations.⁸ As a result, until early in this decade, financial regulators in the United States allocated relatively few resources to developing robust financial CBA.⁹

⁸ See Nicholas Bagley & Richard L. Revesz, Centralized Oversight of the Regulatory State, 106 COLUMB. L. REV. 1260, 1268 (2006) ("Although OIRA oversees a wide array of different agencies, our environmental emphasis reflects the fact that OIRA has focused its attention primarily on the review of EPA regulations, presumably as a result of the economic significance of these regulations. Predictably, then, much of the controversy surrounding OIRA review has arisen in the environmental context."); Steven P. Croley, White House Review of Agency Rulemaking: An Empirical Investigation, 70 U. CHI. L. REV. 821, 865-66, 872-73 (2003) (finding that EPA oversight makes up very large fraction of OIRA's work and attracts considerable controversy); Sherwin, supra note 6, at 2 ("CBA has not been utilized consistently across the different sectors of government regulation. In particular, the nation's financial regulators have largely failed to perform the rigorous analysis required of most other government agencies, especially those in the fields of health, safety, and environmental regulation."); Sunstein, infra note 30, at 269 ("OIRA's staff is relatively small (around fifty people), and it does not now have a great deal of expertise on financial regulation in particular. It would be challenging for OIRA to review financial regulations without adding more personnel, and it is not clear that it has the authority to do that.") (footnotes omitted). But see Cass R. Sunstein, The Office of Information and Regulatory Affairs: Myth and Realities, 126 HARV. L. REV. 1838, 1845 (2013) ("OIRA consists of about forty-five people, almost all of them career staff. They work in a number of branches, covering different agencies and areas. Each of the branches has a number of desk officers, all with substantive expertise in one or more areas, and spending most of their time on one or a small number of agencies.") (internal quotation marks omitted).

⁹ In some jurisdictions outside of the United States, financial CBA received more attention. Notably, the now defunct United Kingdom's Financial Services Authority, which operated under explicit cost-benefit requirements, generated a significant amount of regulatory focus on financial CBA as early as 1999. See e.g., FIN. SERVS. AUTH., CENT. POLICY, PRACTICAL COST-BENEFIT ANALYSIS FOR FINANCIAL REGULATORS: VERSION 1.1 5 (June 2000), http://www.fsa .gov.uk/pubs/foi/cba.pdf (providing a justification for financial CBA); Isaac Alfon & Peter Andrews, Cost-Benefit Analysis in Financial Regulation: How to Do It and How It Adds Value (Fin. Servs. Auth., Occasional Paper Series No. 3, 1999), at 25 (expressing optimism about the FSA's ability to overcome the "central problem" of identifying "extremely complex" economic interactions); David Simpson et al., Some Cost-Benefit Issues in Financial Regulation (Fin. Servs. Auth., Occasional Paper Series No. 12, 2000), at 5 (discussing various problems with financial CBA). This scholarly trend in the United Kingdom has continued to mature, yielding technically sophisticated cost-benefit analyses. See, e.g., Jonathan Brogaard et al., High-Frequency Trading and the Execution Costs of Institutional Investors, 49 Fin. Rev. 345, 347 (2014) (modeling the execution costs of institutional investors due to high-frequency trading); Sebastián de-Ramon et al., Measuring the Impact of Prudential Policy on the Macroeconomy: A Practical Application to Basel III and Other Responses to the Financial Crisis (Fin. Servs. Auth., Occasional Paper Series No. 42, 2012), at 3 (modeling the "tradeoffs between stability and the provision of finance to the real economy"). For an excellent

Federal Reserve Board, the CFTC, the FDIC, the FTC, and the SEC."). The Dodd-Frank Act revised the Paperwork Reduction Act to include the OCC, CFPB, and the Office of Financial Research as independent regulatory agencies. *See* Dodd-Frank Act §§ 315, 1100D(a), 44 U.S.C. §3502(5) (2018).

Starting in 2010, however, the legal landscape in the United States changed. First, with the passage of the Dodd-Frank Act that year, financial regulators were charged with the task of promulgating large numbers of new regulations, which focused industry attention on the potential costs of new compliance requirements.¹⁰ Second, and even more importantly within the legal academy, the D.C. Circuit in 2011 placed financial CBA at the fore-front of regulatory and scholarly agendas through its controversial and now much debated *Business Roundtable* decision.¹¹ While building on prior rulings,¹² *Business Roundtable* signaled that the federal courts, in applying the Administrative Procedure Act,¹³ might demand fairly detailed financial CBA for all new regulations of the SEC and perhaps also other financial agencies.¹⁴

¹⁰ PAUL ROSE & CHRISTOPHER J. WALKER, THE IMPORTANCE OF COST-BENEFIT ANALYSIS IN FINANCIAL REGULATION 9 (2013) ("Dodd-Frank [passed in 2010] has brought cost-benefit analysis in financial regulation to the fore by requiring financial regulators to promulgate hundreds of new rules.").

¹¹ Bus. Roundtable v. SEC, 647 F.3d 1144, 1148 (D.C. Cir. 2011) (holding that the SEC had acted arbitrarily and capriciously in adopting a rule governing shareholder proxy access rights because it failed to adequately assess the economic effects of the rule).

¹² See Am. Equity Inv. Life Ins. Co. v. SEC, 613 F.3d 166 (D.C. Cir. 2010) (holding that the agency "acted arbitrarily and capriciously for having failed . . . adequately to assess" the effects of its rule on "efficiency, competition, and capital formation"); Chamber of Commerce v. SEC, 412 F.3d 133, 144 (D.C. Cir. 2005) (holding that the SEC had "fail[ed] adequately to consider the costs" of its investment company reforms); Pub. Citizen v. Fed. Motor Carrier Safety Admin., 374 F.3d 1209, 1216 (D.C. Cir. 2004) (holding that the Department of Transportation's rule was "arbitrary and capricious because the agency neglected to consider a statutorily mandated factor - the impact of the rule on the health of drivers"); *see also* James D. Cox & Benjamin J.C. Baucom, *The Emperor Has No Clothes: Confronting the D.C. Circuit's Usurpation of SEC Rulemaking Authority*, 90 Tex. L. Rev. 1811, 1812–15 (2012) (describing how the D.C. Circuit in *Business Roundtable* "followed a now familiar path of invalidating SEC rulemaking efforts on the ground that the SEC failed to" consider the rule's effects on efficiency, competition, and capital formation); Sherwin, *supra* note 6, at 3 (describing the D.C. Circuit's invalidation of the SEC's rulemaking on cost-benefit grounds in *Chamber of Commerce*).

¹³ 5 U.S.C. §§ 551–59, 701–06 (2018).

¹⁴ See, e.g., Robert B. Ahdieh, *Reanalyzing Cost-Benefit Analysis: Toward a Framework of Function(s) and Form(s)*, 88 N.Y.U. L. REV. 1983, 1989, 1991 (2013) ("Perhaps most surprising . . . was *Business Roundtable's* dramatic departure from the deference the courts had previously shown agency evaluations of costs and benefits . . . *Business Roundtable* is no less important for students of administrative law generally than it is for experts in financial regulation.") (footnote omitted); Grant M. Hayden & Matthew T. Bodie, *The Bizarre Law and Economics of* Business Roundtable v. SEC, 38 J. CORP. L. 101, 102 (2012) ("Other commentators have noted that the D.C. Circuit's opinion rests on an extremely muscular version of judicial review—one that contravenes the traditional deference to administrative authority.") (footnote omitted); Bruce Kraus & Connor Raso, *Rational Boundaries for SEC Cost-Benefit Analysis*, 30 YALE J. ON REG. 289, 290–91 (2013) ("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.") (footnotes omitted). Since *Business Roundtable*, Supreme Court and other court decisions have suggested that some courts should demand some form of cost-benefit analysis

overview of the current British approach to economic analysis of financial regulation, see Fin. Conduct Auth., *Economics for Effective Regulation* (Fin. Conduct Auth., Occasional Paper No. 13, Mar. 2016), at 6 (establishing a methodology for regulatory economic analysis that contemplates a three-stage process, to be conducted for all financial markets, and including "problem diagnosis," intervention design, and "impact analysis").

Reactions to *Business Roundtable* have been plentiful and can be sorted into four groups. First, academic commentators produced a spate of articles largely critical of the decision,¹⁵ arguing that the D.C. Circuit had imposed too stringent a standard on the SEC, misconstruing the statutory mandate under which the Commission operates.¹⁶ Second, the SEC and other agencies responded to the *Business Roundtable* case by instituting internal reforms to improve their cost-benefit procedures, in some instances¹⁷ embracing the

¹⁵ But see, e.g., Rose & WALKER, supra note 10, at 33 ("[T]he D.C. Circuit's moresearching inquiry in Business Roundtable must be placed within its proper context—one in which the SEC had failed for years to take seriously its statutory obligation to consider the costs and benefits of its proposed regulatory actions."); Caroline Cecot & W. Kip Viscusi, Judicial Review of Agency Benefit-Cost Analysis, 22 GEo. MASON L. REV. 575, 577 (2015) (providing an "evaluat[ion of] judicial review of agency [CBA] based on a substantial sample of thirty-eight judicial decisions" and finding that courts are both willing and competent to evaluate CBA, including its methodology and assumptions).

¹⁶ See, e.g., Cox & Baucom, supra note 12, at 1813 ("[T]he 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.); Jill E. Fisch, *The Long Road Back: Business Roundtable and the Future of SEC Rulemaking*, 36 SEATTLE U. L. REV. 695, 697–98 (2013) ("In evaluating the SEC's decision to adopt a proxy access rule, the D.C. Circuit completely disregarded the congressional policy judgments reflected in Dodd-Frank."); 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, 749 (2012) ("[T]he correct level of judicial scrutiny that the [D.C. Circuit] should have applied is far more deferential than the nearly insurmountable de novo-like review it employed throughout [Business Roundtable]."); J. Robert Brown, Jr., Shareholder Access and Uneconomic Economic Analysis: Business Roundtable v. SEC, 88 DENVER U.L. REV. ONLINE (2011), http://www.denverlawreview.org/dlr-onlinearticle/2011/9/30/shareholder-access-and-uneconomic-economic-analysis-business.html ("The D.C. Circuit struck down the rule, imposing a 'nigh impossible' standard with respect to the applicable economic analysis.") (footnote omitted).

See, e.g., The SEC's Aversion to Cost-Benefit Analysis: Hearing Before H. Subcomm. on Oversight and Government Reform Subcommittee on TARP, Financial Services, and Bailouts of Public and Private Programs, 112th Cong. (2012) (statement of Mary Schapiro) ("Our new guidance . . . reflects many of the current best practices in economic analysis, which the agency will continue to refine in the future as necessary."); U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-12-151, DODD-FRANK ACT REGULATIONS: IMPLEMENTATION COULD BENEFIT FROM ADDITIONAL ANALYSES AND COORDINATION 12 (2011) ("Although federal financial regulatory agencies are not required to follow E.O. 12866 or OMB Circular A-4, CFTC, Federal Reserve Board, FDIC, NCUA, OCC, and SEC officials have said that their agencies follow OMB's guidance in spirit or principle. CFPB officials also said that the Bureau expects to follow the spirit of OMB's guidance."); Letter (Response to a Congressional Request Regarding the Economic Analysis Associated with Specified Rulemakings) from Office of Inspector Gen., Bd. of Governors of the Fed. Reserve Sys., to Senate Comm. on Banking, Hous., and Urban Affairs 9, 19-20 (June 2011), http://oig.federalreserve.gov/reports/Congressional_Re sponse_economic_analysis_2011web.pdf (June 2011) (arguing that the Federal Reserve "conducts its rulemaking activities in a manner that is generally consistent with the philosophy and principles outlined in the Executive Orders" and suggesting that the Federal Reserve acts consistently with at least some aspects of the guidance in Circular A-4); Memorandum of Under-

for a wide range of administrative agency decisions, irrespective of whether the agencies are independent. *See, e.g.,* Michigan v. EPA, 135 U.S. 2699, 2707 (2015) ("No regulation is 'appropriate' if it does significantly more harm than good."); MetLife v. Fin. Stability Oversight Council, 177 S. Supp. 3d 219, 241–42 (D.D.C. 2016) (citing the Supreme Court's Michigan v. EPA decision and concluding that costs represent "a consideration that is essential to reasoned rulemaking"). For a discussion of how and why cost benefit analysis might be incorporated into judicial review of administrative decisions, see Cass R. Sunstein, *Cost-Benefit Analysis and Arbitrariness Review*, 41 HARV. ENVTL. L. REV. 1 (2017).

standards that the OMB had developed for executive agencies.¹⁸ Third, governmental bodies and independent organizations commissioned a series of studies of CBA at independent agencies in general¹⁹ and financial agencies

standing between Office of Info. and Regulatory Affairs and Commodity Futures Trading Comm'n (May 9, 2012), http://www.whitehouse.gov/sites/whitehouse.gov/files/omb/inforeg/ inforeg/regpol/oira_cftc_mou_2012.pdf ("The CFTC staff guidance for the consideration of costs and benefits in rulemakings is informed by OIRA's guidance for the conduct of costbenefit analyses . . . "); Memorandum from the SEC Div. of Risk, Strategy, and Fin. Innovation and the Office of the Gen. Counsel to the Staff of the Rulewriting Divs. and Offices (Mar. 16, 2012), https://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_secrulemaking.pdf (providing extensive guidance on economic analysis in SEC rulemakings); see also Rose & WALKER, supra note 10, at 34 ("[T]he SEC's Guidance Memorandum embraces the costbenefit analysis fundamentals set forth in the D.C. Circuit's trilogy [of cases]."); Jerry Ellig & Hester Peirce, SEC Regulatory Analysis: A Long Way to Go and a Short Time to Get There, 8 BROOK. J. CORP. FIN. & COM. L. 361, 371 (2014) (arguing that the SEC's internal reforms are "based on the executive orders and the accompanying OIRA guidance governing economic analysis at executive agencies") (footnote omitted); Craig M. Lewis, Chief Economist and Director, Sec. & Exch. Comm'n, Speech at the SIFMA Compliance & Legal Society Luncheon: The Expanded Role of Economists in SEC Rulemaking (Oct. 16, 2012), http://www.sec .gov/News/Speech/Detail/Speech/1365171491420#.VPtoO_nF-So (defending the SEC's use of economic analysis in rulemakings and "urg[ing]" commenters to "engage in the same thoughtful and difficult analyses that we are performing at the Commission").

¹⁸ Exec. Order No. 13,579, 76 Fed. Reg. 41,587, § 2(b) (July 11, 2011) (stating that "each independent regulatory agency should develop and release to the public a plan . . . under which the agency will periodically review its existing significant regulations to determine whether any such regulations should be modified, streamlined, expanded, or repealed so as to make the agency's regulatory program more effective or less burdensome in achieving the regulatory objectives"); Exec. Order No. 12,866, 58 Fed. Reg. 51,735, § 4(c)(1)(B) (Sept. 30, 1993) (requiring that independent agencies submit regulatory plans with a "summary of each planned significant regulatory action including, to the extent possible, alternatives to be considered and preliminary estimates of the anticipated costs and benefits"); see OFFICE OF INFO. & REGULA-TORY AFFAIRS, OFFICE OF MGMT. & BUDGET, REGULATORY IMPACT ANALYSIS: A PRIMER 1 (Aug. 15, 2011), http://www.whitehouse.gov/sites/whitehouse.gov/files/omb/inforeg/inforeg/ regpol/circular-a-4_regulatory-impact-analysis-a-primer.pdf (explaining to executive agencies how to "develop[] regulatory impact analyses"); OFFICE OF MGMT. & BUDGET, CIRCULAR A-4, REGULATORY ANALYSIS 1 (Sept. 17, 2003), http://www.whitehouse.gov/sites/whitehouse .gov/files/omb/assets/regulatory_matters_pdf/a-4.pdf (explaining to executive agencies on how to conduct regulatory analysis); see also Sherwin, supra note 6, at 11-12 (describing how Executive Order 12866 "serve[s] to keep OMB apprised of [independent] agencies' activities").

¹⁹ See, e.g., U.S. Gov't Accountability Office, GAO-14-714, Federal Rulemaking: AGENCIES INCLUDED KEY ELEMENTS OF COST-BENEFIT ANALYSIS, BUT EXPLANATIONS OF REG-ULATIONS' SIGNIFICANCE COULD BE MORE TRANSPARENT 16 (2014) (criticizing financial regulators as well as OIRA for "[n]ot [a]lways [being] [t]ransparent about [h]ow [r]ules [a]re [d]esignated"); U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-13-101, DODD-FRANK ACT REGU-LATIONS: AGENCIES' EFFORTS TO ANALYZE AND COORDINATE THEIR RULES 10 (Dec., 2012) (criticizing financial regulators for not "consistently follow[ing] key elements of [OMB] guidance in their regulatory analysis"); U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-12-151, supra note 17, at 14 (criticizing financial regulators' policies and procedures for not "fully reflect[ing] OMB guidance on regulatory analysis"); see also ADMIN. CONFERENCE OF U.S., Administrative Conference Recommendation 2013-2: Benefit-Cost Analysis at Inde-PENDENT REGULATORY AGENCIES 5-8 (June 13, 2013), https://www.acus.gov/sites/default/ files/documents/Recommendation%202013-2%20%28Benefit-Cost%20Analysis%29.pdf; COMM. ON CAPITAL MKTS. REGULATION, A BALANCED APPROACH TO COST-BENEFIT ANALY-SIS REFORM 4-10, 17-18 (2013) (analyzing the CBA performance of financial regulators and proposing that "Congress should subject all independent financial regulatory agencies . . . to CONSISTENT COST-BENEFIT STANDARDS aligned with the principles set forth by the Clinton Orin particular.²⁰ Finally, members of Congress and lobbying groups have responded with various legislative proposals that would, in some sense, codify the *Business Roundtable* holding and impose some sort of statutory CBA requirement on independent agencies, including independent financial regulators.²¹ While none of these legislative proposals have been enacted, the Trump Administration has emphasized the importance of financial CBA²² and recently taken some preliminary steps to give OIRA greater visibility

²⁰ See, e.g., Office of the Inspector Gen., Dep't of the Treasury, Dodd-Frank Act: CONGRESSIONAL REQUEST FOR INFORMATION REGARDING ECONOMIC ANALYSIS BY OCC (OIG-CA-11-006) 2 (June 13, 2011), http://www.treasury.gov/about/organizational-structure/ig/Documents/OIG-CA-11-006.pdf (praising OCC for having the "processes in place to ensure that required economic analyses are performed consistently and with rigor" and recommending that OCC develop procedures for intra-office and inter-agency coordination); OFFICE OF THE INSPECTOR GEN. OF THE CFTC, A REVIEW OF COST-BENEFIT ANALYSES PERFORMED BY THE COMMODITY FUTURES TRADING COMMISSION IN CONNECTION WITH RULEMAKINGS UNDER-TAKEN PURSUANT TO THE DODD-FRANK ACT ii (June 13, 2011), http://www.cftc.gov/ucm/ groups/public/@aboutcftc/documents/file/oig_investigation_061311.pdf (criticizing the CFTC for the "greater 'say" of the Office of General Counsel in the cost-benefit analysis process); OFFICE OF THE INSPECTOR GEN. OF THE SEC, FOLLOW-UP REVIEW OF COST-BENEFIT ANALY-SES IN SELECTED SEC DODD-FRANK RULEMAKINGS iii-iv (Jan. 27, 2012), http://www.sec.gov/ about/offices/oig/reports/audits/2012/rpt499_followupreviewofd-f_costbenefitanalyses_508 pdf (criticizing the SEC for "a lack of macro-level analysis and a lack of quantitative analysis on the impact of the [agency's] rules"); see also Rose & WALKER, supra note 10, at 2 (observing that "the Inspectors General of the [SEC] and the [CFTC] have found serious deficiencies in the financial regulators' use of cost-benefit analysis after Dodd-Frank") (footnote omitted).

²¹ See, e.g., Regulatory Accountability Act of 2015, H.R. 185, 114th Cong. §3(b) (2015) (requiring all federal agencies to conduct cost-benefit analysis in rulemakings, including an assessment of the costs and benefits of regulatory alternatives); Independent Agency Regulatory Analysis Act of 2013, S. 1173, 113th Cong. (2013) (intending "[I]o affirm the authority of the President to require independent regulatory agencies to comply with regulatory analysis requirements applicable to executive agencies"); SEC Regulatory Accountability Act, H.R. 1062, 113th Cong. § 2 (2013) (requiring the SEC to conduct cost-benefit analysis in its rulemakings); see also Legislative Proposals Regarding Derivatives and SEC Economic Analysis: Hearing Before the Subcomm. on Capital. Mkt. & Gov. Sponsored Enter. of the H. Comm. on Fin. Serv., 113th Cong. 1 (2013) ("Today's hearing will examine seven specific legislative proposals to . . . codify a good government regulatory approval process for the SEC."); The SEC's Aversion to Cost-Benefit Analysis: Hearing Before the Subcomm. On TARP, Fin. Serv. & Bailouts of Pub. & Private Programs of the H. Comm. on Oversight & Gov. Reform, 112th Cong. 3 (2012) (examining the role of cost-benefit analysis in SEC rulemaking).

²² See, e.g., U.S. DEP'T OF TREASURY, A FINANCIAL SYSTEM THAT CREATES ECONOMIC OPPORTUNITIES: BANKS AND CREDIT UNIONS 17 (June 2017) ("Treasury recommends that financial regulatory agencies perform and make available for public comment a cost-benefit analysis with respect to at least all 'economically significant' proposed regulations..."). The CFPB itself also recently scheduled a symposium on cost-benefit analysis in the near future. Press Release, Consumer Fin. Prot. Bureau, Consumer Financial Protection Bureau Announces Symposium Series (Apr. 18, 2019), https://www.consumerfinance.gov/about-us/newsroom/bureau-announces-symposia-series/.

der and the First Obama Order"); ROSE & WALKER, *supra* note 10, at 2 (observing that the GAO "faulted financial regulators for failing to monetize or quantify costs and benefits") (footnote omitted); Curtis W. Copeland, *Economic Analysis and Independent Regulatory Agencies* 4 (Admin. Conference of U.S., Apr. 30, 2013), https://www.acus.gov/sites/default/files/documents/Copeland%20Final%20BCA%20Report%204-30-13.pdf (offering "a series of 'best practices' that independent regulatory agencies could use to improve their economic analyses," such as adopting the guidelines in OMB's Circular A-4).

into the ways in which independent financial agencies are assessing costs and benefits.²³ Although the more dire predictions regarding the implications of the *Business Roundtable* decision for financial regulators have yet to be borne out,²⁴ the decision is nonetheless of lasting importance for the attention it has brought to financial CBA.

The past few years have also seen a flood of articles on financial CBA that move well beyond the early critiques of the *Business Roundtable* decision. Crudely put, academics can be divided into two camps, with the CBA enthusiasts, led by Eric Posner and Glenn Weyl, on one side, and the CBA skeptics, including John Coates and Jeff Gordon, on the other. The enthusiasts argue that financial regulation is no different than other kinds of regulation and the same rules governing CBA in other areas should be applied to financial CBA.²⁵ The skeptics, in contrast, emphasize the complexity of fi-

²⁴ Compare Nat'l Ass'n of Mfrs. v. SEC, 748 F.3d 359, 370-71, 373 (D.C. Cir. 2014) (holding that the SEC's analysis of costs and benefits was adequate but that aspects of the SEC's rule violated the First Amendment), and R.J. Reynolds Tobacco Co. v. FDA, 696 F.3d 1205, 1222 (D.C. Cir. 2012) (holding that the FDA did not meet the APA's substantial evidence standard because the agency failed to show that "enacting their proposed graphic warnings [on cigarette packages] will accomplish [its] stated objective of reducing smoking rates"), with Am. Meat Inst. v. U.S. Dep't of Agric., 760 F.3d 18, 22–23 (D.C. Cir. 2014) (overruling the First Amendment holdings of R.J. Reynolds Tobacco Co. v. FDA and Nat'l Ass'n of Mfrs. v. SEC), and Inv. Co. Inst. v. Commodity Futures Trading Comm'n, 720 F.3d 370, 380 (D.C. Cir. 2013) (holding that the CFTC's consideration of costs and benefits was not arbitrary or capricious); see also Jeff Gordon, The Empty Call for Benefit-Cost Analysis in Financial Regulation, 43 J. LEGAL STUD. S351, S373 (2014) ("Investment Company Institute v. CFTC therefore provides a basis for optimism that the D.C. Circuit will not interfere with rule making that implements the Dodd-Frank Act by the financial regulatory agencies, even the SEC."); Cass R. Sunstein & Adrian Vermeule, Libertarian Administrative Law, 82 U. CHI. L. REV. 393, 451 (2015) ("Investment Co[mpany] Institute displays a tolerance of regulation under conditions of uncertainty that is entirely foreign to its predecessor [Business Roundtable]."). But see Bianca Nunes, Case Note, The Future of Government-Mandated Health Warnings After R.J. Reynolds and American Meat Institute, 163 U. PENN. L. REV. 177, 180, 212 ("Although American Meat Institute lessened the blow R.J. Reynolds dealt to regulators, both decisions left open important questions about the First Amendment treatment of government-mandated warnings that are neither 'purely factual and uncontroversial' disclosures nor overt government-sanctioned opinions, and about whether graphic cigarette warnings belong in this middle ground.") ("Despite this victory for regulators [in American Meat Institute], FDA still faces a formidable challenge in selecting revised graphic cigarette warnings.") (footnotes omitted).

²⁵ See, e.g., ROSE & WALKER, supra note 10, at 20–24 (providing justifications for costbenefit analysis in financial regulation); Eric A. Posner & E. Glenn Weyl, *Benefit-Cost Paradigms in Financial Regulation*, 43 J. LEGAL STUD. S1, S2 (2014) ("[T]here is no reason to believe that BCA would be appropriate for environmental or workplace regulation and not for

²³ In particular, the Acting Director of OMB recently issued a memorandum requiring all federal agencies, including independent financial agencies, to submit to OIRA information about the "costs, benefits, and transfer impacts" of new rules in order for OMB to evaluate whether those rules are "major rules" for purposes of the Congressional Review Act. Memorandum from Russel T. Vought, Acting Dir., Consumer Fin. Prot. Bureau, to the Heads of Executive Departments and Agencies (Apr. 11, 2019), https://www.whitehouse.gov/wp-content/uploads/2019/04/M-19-14.pdf. While this requirement does not bring the CBA analysis of independent financial agencies under the same intensity of OIRA review as applies to executive agencies, it does represent a movement in that direction. *See* Victoria Guida, *White House Moves to Tighten Control Over Federal Regulators*, POLITICO (Apr. 11, 2019), https://www.politico.com/story/2019/04/11/white-house-federal-regulators-1347496.

nancial markets and the challenges of estimating both the positive and negative effects of financial regulatory intervention.²⁶ The skeptics also highlight the distortions that CBA may create in the regulatory process, arguing that regulatory personnel would face incentives to doctor the administrative record underlying financial CBA in order to withstand judicial review.²⁷ While the skeptics do not oppose careful consideration of the pros and cons of regulatory intervention—admitting the usefulness of "conceptual" CBA they do oppose mandated quantification or monetization of financial regulation as counterproductive and wasteful, at least given the present state of CBA techniques.²⁸ The enthusiasts, including Cass Sunstein,²⁹ have responded by criticizing the skeptics' proposed alternatives and reiterating the

²⁶ See, e.g., John C. Coates IV, *Cost-Benefit Analysis of Financial Regulation: Case Studies and Implications*, 124 YALE L.J. 882, 999–1003 (2015) (arguing that quantified financial CBA is likely to be unreliable because financial regulation generates "large (and uncertain) effects on economic growth," "the main units of variation and change in finance are not things, or even individuals, but *groups* of people," and financial regularities are "more likely to change over time than in other domains."); *cf.* Gordon, *supra* note 24, at S360, S366 (arguing that financial CBA will not be helpful because "the financial system is not a natural system" and "continuous second-order effects make the benefits and costs of rule adoption impossible to quantify in a meaningful way").

²⁷ Coates, *supra* note 26, at 1004 ("Judicial review is not likely to generate any significant improvement in CBA/FR itself, as agencies will likely respond to the threat of such review by hiding, not exposing, the weaknesses in their analyses."); Gordon, *supra* note 24, at S353 ("[Financial BCA] as it has come to be used in the modern administrative state is virtually useless in the setting of optimal financial regulation and simply gets in the way of the genuinely hard work to be done. If applied through the machinery of the legal system—especially hard look judicial review that invites de novo relitigation of empirically contestable conjectures—[financial CBA] is likely to stymic regulation aimed at the reduction of systemic risk in favor of privileging a status quo that we know is unstable.").

²⁸ See, e.g., John C. Coates IV, *Towards Better Cost-Benefit Analysis: An Essay on Regulatory Management*, 78 LAW & CONTEMP. PROBS. 1, 3 (2015) ("I believe that quantified CBA-FR is a worthy if distant goal, and conceptual CBA is currently a valuable if limited element of the regulatory toolkit."); Gordon, *supra* note 24, at S354 ("IP]ragmatic judgment in the financial regulatory arena ought to include efforts to understand the consequences of particular proposals, including through the use of social science methods that may forecast economic consequences. But the desire to ground decisions on that which can be quantified is a self-deceptive conceit in the financial regulatory area that obscures more than it illuminates.").

²⁹ Sunstein has written extensively on CBA. See, e.g., Cass R. Sunstein, Empirically Informed Regulation, 78 U. CHI. L. REV. 1349, 1350 (2011) (exploring the implications of social science research for regulation); Cass R. Sunstein, The Limits of Quantification, 102 CAL. L. REV. 1369 (2014) (advocating for the use of breakeven analysis when dealing with nonquantifiable values); Cass R. Sunstein, The Real World of Cost-Benefit Analysis: Thirty-Six Questions (And Almost as Many Answers), 114 COLUM. L. REV. 167, 202 (2014) (exploring "highly stylized problems" in CBA). While much of Sunstein's work addresses CBA more generally, he has begun to address financial CBA specifically. See Sunstein, infra note 30, at 263, 267–68 (arguing for the use of breakeven analysis in financial CBA and addressing judicial review concerns). For a less technical overview of his views on the subject, see Cass R. SUNSTEIN, THE COST-BENEFIT REVOLUTION (2018).

financial regulation. Indeed, BCA would seem more appropriate for financial regulation where data are better and more reliable and where regulators do not confront ideologically charged valuation problems like those concerning mortality risk and environmental harm. The benefits and costs of financial regulation are commensurable monetary gains and losses and so can be easily compared."); *cf.* John H. Cochrane, *Challenges for Cost-Benefit Analysis of Financial Regulation*, 43 J. LEGAL STUD. S63, S63 (2014) (arguing for a cost-benefit process that "I[ies] between pure conceptual [CBA] and the rigid legal structure currently envisioned").

feasibility of financial CBA.³⁰ Professor Coates, who has emerged as the most prolific member of the skeptical camp, maintains his reservations with respect to the current state of financial CBA but also emphasizes what he sees as a gradual convergence between the two sides of the debate as even financial CBA enthusiasts acknowledge limitations in current practices.³¹

In addition to this ongoing debate, the legal literature on financial CBA also includes a number of articles exploring related issues, such as optimal institutional arrangements for producing financial CBA,³² literature reviews designed to ascertain whether previous regulatory actions produced net benefits,³³ explorations of the soundness of previous agency attempts at financial

⁵³ See, e.g., Sumit Agarwal et al., Regulating Consumer Financial Products: Evidence from Credit Cards, 130 Q.J. ECON. 111, 112, 115 (2014) (studying "the effectiveness of" credit card regulation and finding that the CARD Act created a net reduction in borrowing costs); John C. Coates & Suraj Srinivasan, SOX after Ten Years: A Multidisciplinary Review, 28 ACCT. HORIZONS 627, 628 (2014) (finding that research on the "net costs and benefits" of the Sarbanes-Oxley Act is "inconclusive"); Martin Eling & David Pankoke, Costs and Benefits of Financial Regulation: An Empirical Assessment for Insurance Companies, 41 GENEVA

³⁰ See, e.g., Eric A. Posner & E. Glen Weyl, *Cost-Benefit Analysis of Financial Regulations: A Response to Criticisms*, 124 YALE L.J.F. 246, 247 (2015), http://www.yalelawjournal .org/forum/cost-benefit-analysis-of-financial-regulations (arguing that Coates and Gordon's alternatives provide "empty if not circular standard[s] for evaluating regulations" and that the valuations of financial CBA are easier to conduct than the ones for other areas of regulation); Cass R. Sunstein, *Financial Regulation and Cost-Benefit* Analysis, 124 YALE L.J.F. 263, 263, 267–68 (2015), http://www.yalelawjournal.org/forum/financial-regulation-and-cost-benefitanalysis ("There is no reason to think that it is always or usually impossible for financial regulators to conduct cost-benefit analysis'. And when agencies face serious gaps in knowledge, they should enlist 'breakeven analysis' . . .") ("[1] tis unclear whether judicial review would be helpful or harmful. On the one hand, such review could decrease the likelihood of mistakes on the part of agencies, creating an ex post corrective and an ex ante deterrent for poor policymaking . . . On the other hand, judges might themselves err.").

³¹ See John Č. Coates IV, *Cost-Benefit Analysis of Financial Regulation: A Reply*, 124 YALE L.J.F. 305, 305, 310 (2015), http://www.yalelawjournal.org/forum/cost-benefit-analysisof-financial-regulation-a-reply ("Sunstein's focus on alternatives to standard CBA (such as breakeven analysis, in my view, implicitly concedes [that there are significant challenges in quantifying the costs and benefits of financial regulation].") ("While [Posner and Weyl] point out correctly that financial modeling can be usefully used to predict markets, they offer no examples where quantified CBA of major financial *regulations* is or could be reliable and precise.") (footnote omitted).

³² See, e.g., Robert P. Bartlett III, The Institutional Framework for Cost-Benefit Analysis in Financial Regulation: A Tale of Four Paradigms?, 43 J. LEGAL STUD. S379, S403 (2014) (arguing that "[t]he institutional framework under which agencies conduct CBA significantly affects [their] rigor . . . and the likelihood that CBA can undermine their regulatory agendas," and proposing "a more uniform" institutional framework for financial CBA, including "some degree of interagency coordination"); Coates, supra note 28 (proposing a host of institutional reforms to improve financial CBA, including the restriction of 'hard look' judicial review, elimination of legal impediments on agency data gathering, and improvement of funding for financial CBA); Matthew Spitzer & Eric Talley, On Experimentation and Real Options in Financial Regulation, 43 J. LEGAL STUD. S121 (2014) (arguing that there is a tension between the judiciary and agencies regarding the use of field experimentation in CBA); Richard L. Revesz, Cost-Benefit Analysis and the Structure of the Administrative State: The Case of Financial Services Regulation, 34 YALE J. ON REG. 545 (2017) (proposing a role for FSOC and OIRA in overseeing financial CBA); Ryan Bubb, Comment, The OIRA Model for Institutionalizing CBA of Financial Regulation, 78 LAW & CONTEMP. PROBS. 47, 52 (2015) (proposing that "an OIRA-type regime" serve as an integral part of a regulatory review regime for financial CBA).

CBA in specific cases,³⁴ and discussions of how financial CBA might be conducted and improved in the future within specific areas of regulation.³⁵

PAPERS ON RISK & INSURANCE 529 (2016) (analyzing the costs and benefits of insurance regulation).

³⁴ See, e.g., Frank J. Chaloupka et al., An Evaluation of the FDA's Analysis of the Costs and Benefits of the Graphic Warning Label Regulation, 24 TOBACCO CONTROL 112, 112 (2014,) (arguing that "the [FDA's] analysis of the impact of [graphic warning labels on cigarette packages] substantially underestimated the benefits and overestimated the costs"). But see Coates, *supra* note 26, at 926–78 (presenting four case studies of agencies' financial CBAs); Lawrence Jin et al., Retrospective and Prospective Benefit-Cost Analysis of US Anti-Smoking Policies, 6 J. BENEFIT COST ANAL. 154, 180 (2015) (arguing that the FDA's "health benefits" methodology is sound and that "[o]ur illustrative calculations are consistent with the higher end of the range of consumer surplus offset ratios discussed in recent [including FDA] RIAs [(Regulatory Impact Analyses)] that use the health benefits approach to conduct BCAs of health-related regulations"); Bruce R. Kraus, Economists in the Room at the SEC, 124 YALE L.J.F. 280, 283 (2015), http://www.yalelawjournal.org/forum/economists-in-the-room-at-thesec (arguing that the "work of the SEC's economists is neither a meaningless exercise nor a partisan weapon, but honest, interesting work that should be informative to policymakers"); Omri Ben-Shahar & Carl E. Schneider, The Futility of Cost Benefit Analysis in Financial Disclosure Regulation 11-13 (Univ, of Chi. Coase-Sandor Inst. for Law & Econ., Working Paper No. 680, Mar. 2014), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2412688 (analyzing the CFPB's CBA of its mortgage disclosure regulation).

³⁵ See, e.g., Sumit Agarwal et al., A Simple Framework for Estimating Consumer Benefits from Regulating Hidden Fees, 43 J. LEGAL. STUD. S239, S240 (2014) (providing "a simple framework for estimating the overall consumer cost savings from regulating hidden fees"); Daniel Carpenter, Accounting for Financial Innovation and Borrower Confidence in Financial Rule Making: Analogies from Health Policy, 43 J. LEGAL. STUD. S331, S347 (2014) (suggesting that "the rate of new-product innovation and the distribution governing the market's beliefs in those future products . . . be taken into account" by regulators in "[i]n an industrial context where new products may appear regularly over time"); Coates & Srinivasan, supra note 33 (proposing various improvements to modeling the costs and benefits of the Sarbanes-Oxley Act); Prasad Krishnamurthy, Rules, Standards, and Complexity in Financial Regulation, 43 J. LEGAL STUD. S273, S294 (2014) (contending "that rules for minimum capital [requirements] are superior to standards in the presence of aggregate risks, regulatory uncertainty, and agency costs"); Thomas Philippon, Efficiency and Benefit-Cost Analysis of the Financial System, 43 J. LEGAL STUD. S107, S112-18 (2014) (describing techniques for modeling the efficiency of financial intermediation); Eric Posner & E. Glen Weyl, Benefit-Cost Analysis for Financial Regulation, 103 AM. ECON. REV.: PAPERS & PROC. 393, 393-96 (2013) (describing how to quantify systemic crises, informational externalities, and financial gambling); Eric A. Posner & E. Glenn Weyl, An FDA for Financial Innovation: Applying the Insurable Interest Doctrine to Twenty-First-Century Financial Markets, 107 Nw. U. L. Rev. 1307, 1307 (2013) (proposing that agencies approve financial products based on the likelihood that they will be used for insurance as opposed to gambling.); see also 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, 1489 (2002) ("[T]he regulatory state continues to suffer from significant problems, including poor priority-setting, unintended adverse side-effects, and, on occasion, high costs for low benefits. In many cases, agencies do not offer an adequate account of either costs or benefits, and hence the commitment to cost-benefit balancing is not implemented in practice. A major current task is to ensure a deeper and wider commitment to cost-benefit analysis, properly understood. We explain how this task might be accomplished and offer a proposed executive order that would move regulation in better directions."); Eric A. Posner, Controlling Agencies with Cost-Benefit Analysis: A Positive Political Theory Perspective, 68 U. CHI. L. REV. 1137, 1140 (2001) ("This Article analyzes cost-benefit analysis as a method by which the President, Congress, or the judiciary controls agency behavior. It uses a model from the literature on positive political theory to show why the President and Congress will often want agencies to perform cost-benefit analyses. It also uses the model to explore the impact of cost-benefit analysis on courts and interest groups. The model generates testable predictions, including the prediction that introduction of cost-benefit analysis will increase the

This Article joins the literature described above, but with a more positive agenda and limited to consumer financial regulation as opposed to financial regulation more broadly. We are also largely focused on the benefits side of financial CBA,³⁶ emphasizing how regulatory agencies have conducted benefit analysis for consumer protection regulations and giving considerably less attention to the cost side of financial CBA on which industry critics most commonly focus.

B. Broader Scholarship on Regulatory Impact Analysis

Distinct from recent work on financial CBA is a much broader literature on regulatory impact analysis in general and cost-benefit work in other fields of regulation.³⁷ While most of this literature is not directly relevant to the current inquiry,³⁸ Robert Hahn and Patrick Dudley offer a convenient typol-

³⁷ For a good overview of policy analysis in general, including an in-depth discussion of cost-benefit analysis, see DAVID L. WEIMER & ADRIAN R. VINING, POLICY ANALYSIS: CONCEPTS AND PRACTICE 398-434 (6th ed. 2017); ANTHONY E. BOARDMAN, DAVID H. GREENBERG, AIDAN R. VINING, AND DAVID L. WEIMER, COST-BENEFIT ANALYSIS, CONCEPTS AND PRACTICE (5th ed. 2018).

³⁸ For example, we do not address the normative implications of reliance on cost-benefit analysis. See, e.g., James K. Hammitt, Positive versus Normative Justifications for Benefit-Cost Analysis: Implications for Interpretation and Policy, 7 REV. ENVTL. ECON. & POL'Y 199, 214 (2013) (arguing that the appropriate interpretations, implications, and methods of benefit-cost analysis depend on whether the rationale for benefit-cost analysis is positive or normative); Christopher Robert & Richard Zeckhauser, The Methodology of Normative Policy Analysis, 30 J. POLY ANALYSIS & MGMT. 613, 614 (2011) (providing a taxonomy of "positive and normative sources of disagreement" in policy analysis). We also do not address a long-standing debate in environmental regulation on the usefulness and acceptability of discounting lives in particular, and of cost-benefit analysis in general. See also Lisa Heinzerling, Regulatory Costs of Mythic Proportions, 107 YALE L.J. 1981, 2070 (1998) (arguing that the discounting lives method makes it difficult to engage "with a range of fundamental issues, such as the relative worth of lives saved today and lives saved tomorrow, the proper response to scientific uncertainty, and the purposes of environmental law"); Richard L. Revesz, Environmental Regulation, Cost-Benefit Analysis, and the Discounting of Human Lives, 99 Colum. L. REV. 941, 1016 (1999) (arguing that the discounting lives method is appropriate for contexts dealing with "latent harms" but possibly unethical in contexts dealing with "harms to future generations"); see also Richard L. Revesz, The Green Community Should Mend, Not Work in Vain to End, Cost-Benefit Analysis, GRIST (May 8, 2008), http://grist.org/article/cost-benefit-environmentalism (arguing that environmental regulators should "mend" cost-benefit analysis by showing where it has "been twisted" by deregulatory proponents); Lisa Heinzerling, Lisa Heinzerling Responds to Richard Revesz on Cost-Benefit Analysis, GRIST (May 15, 2008), http://grist.org/ article/cost-benefit-environmentalism-an-oxymoron (responding to Revesz by arguing that

amount of regulation."); Richard L. Revesz, *Cost-Benefit Analysis and the Structure of the Administrative State: The Case of Financial Services Regulation*, 34 YALE J. ON REG. 545 (2017) (proposing *inter alia* a role for the FSOC in coordinating macro-economic estimates).

 $^{^{36}}$ This focus on benefits is similar in spirit to the case studies in Coates's recent Yale Law Journal piece, where he reviews the benefit analysis of, for example, the SEC's regulations under the Sarbanes-Oxley Act section 404. Coates, *supra* note 26. However, we draw from a much larger sample of regulations and from a wider range of agencies. *Cf. id.* at 946 ("Depending on assumptions, guesstimated CBA suggests that SOX 404 could be a very good idea, a very bad idea, or anything in between. If one arbitrarily chose the range's midpoint, SOX 404 created a net benefit of \$9 billion. But this bottom line is highly sensitive, as reflected in Table 3, with net benefits changing by between 2*x* and 13*x* as one moves from low to high values for each of five major inputs . . .").

ogy for organizing work in this area designed to measure the quality of regulatory analysis³⁹ (the sub-literature in which our work is most comfortably located). The first Hahn-Dudley category consists of case studies "examin[ing] the details of a particular benefit-cost analysis or group of analyses."⁴⁰ Their second category includes retrospective studies undertaken after a policy initiative is implemented, with the goal of estimating the impact of the initiative after the fact based on some sort of parameter like net benefits or cost effectiveness.⁴¹ Hahn and Dudley's final category—to which the current study belongs—consists of efforts "to score a large number of benefitcost analyses according to whether they meet a number of basic, objective

³⁹ See Robert W. Hahn & Patrick M. Dudley, *How Well Does the U.S. Government Do Benefit-Cost Analysis*, 1 REV. ENVIL. ECON. & POLY 192, 195–96 (2007) (discussing "three approaches for measuring the quality of regulatory analyses").

⁴⁰ Hahn & Dudley, *supra* note 39, at 195. A good deal of Professor Coates's recent *Yale Law Journal* article would fall within this category to the extent that it includes detailed reviews of a handful of specific examples of cost-benefit analysis in financial regulation. *See* Coates, *supra* note 26, at 927–97 (presenting four case studies of imperfect cost-benefit analysis in financial regulation and analyzing two "gold standard" examples of cost-benefit analysis by the SEC and the FSA). For more examples of this case study approach, see, e.g., Chaloupka et al., *supra* note 34, at 112 (arguing that the FDA's "analysis of the impact of [graphic warning labels on cigarette packages] substantially underestimated the benefits and overestimated the costs"); Kraus, *supra* note 34, at 283 (arguing that the "work of the SEC's economists is neither a meaningless exercise nor a partisan weapon, but honest, interesting work that should be informative to policymakers"); Ben-Shahar & Schneider, *supra* note 34, at 11–13 (analyzing the CFPB's CBA of its mortgage disclosure regulation); *see also* DAVID L. WEIMER & ADRIAN R. VINING, POLICY ANALYSIS: CONCEPTS AND PRACTICE 411-23 (5th ed. 2011) (illustrating cost-benefit analysis techniques through a case study involving an alcohol tax); *see also infra* notes 86–87 (citing to several CFPB retrospective reviews).

⁴¹ Hahn & Dudley, *supra* note 39, at 196. For examples of this retrospective analysis approach, see, e.g., Howell E. Jackson & Jeffery Y. Zhang, Private and Public Enforcement of Securities Regulation, in THE OXFORD HANDBOOK OF CORPORATE LAW AND GOVERNANCE 928-45 (Jeffrey N. Gordon & Wolf-Georg Ringe eds., 2018) (exploring the impact of staffing and budget levels on the quality of financial markets); RESOURCES FOR THE FUTURE, RE-FORMING REGULATORY IMPACT ANALYSIS (Winston Harrington et al. eds., 2009) (describing and critiquing three regulatory impact analyses of the EPA); Agarwal et al., supra note 33, at 15 (analyzing "the effectiveness" of credit card regulation and finding that the CARD Act created a net reduction in borrowing costs); Coates & Srinivasan, supra note 33, at 628 (finding that research on the "net costs and benefits" of the Sarbanes-Oxley Act is "inconclusive"); Winston Harrington et al., On the Accuracy of Regulatory Cost Estimates, 19 J. POL'Y ANALY-SIS & MGMT. 297, 305–13 (2000) (comparing ex ante and ex post cost estimates of various environmental regulations); see also JOSEPH E. ALDY, LEARNING FROM EXPERIENCE: AN AS-SESSMENT OF THE RETROSPECTIVE REVIEWS OF AGENCY RULES AND THE EVIDENCE FOR IM-PROVING THE DESIGN AND IMPLEMENTATION OF REGULATORY POLICY 6-7 (2014), https://www .acus.gov/sites/default/files/documents/Aldy%2520Retro%2520Review%2520Draft%252011-17-2014.pdf (demonstrating that less than ten percent of "recent economically significant rules ... are the result of r etrospective review" and recommending various improvements in how agencies conduct retrospective reviews); Jennifer Baxter, Lisa A. Robinson, & James Hammitt Retrospective Benefit-Cost Analysis (Apr. 20, 2015) (Regulatory Reform for the 21st Century City White Paper) (providing a framework for conducting retrospective analysis).

[&]quot;cost-benefit analysis is at odds with fundamental premises of environmentalism, and it's not particularly good at either reason or compassion"); Richard L. Revesz, *Richard Revesz Responds to Lisa Heinzerling, Defending Cost-Benefit Analysis*, GRIST (June 5, 2008), http://grist .org/article/a-tool-in-the-toolbox (responding to Heinzerling by arguing that "rejecting costbenefit analysis instead of seeking to reform it would be a major strategic error for the environmental movement").

criteria, such as whether some costs and benefits were monetized, whether costs and benefits were discounted, and whether alternatives were considered." 42

Within the third category, researchers have developed numerous approaches to scoring. For example, the degree of quantification and monetization can be scored by assessing whether costs and benefits have at least been "expressed in some countable unit" (quantification), and perhaps even in dollar values (monetization).⁴³ Within the quantification and monetization inquiry, whether the agency gave "a point estimate" (or a specific value) as opposed to a range of estimates can also be scored.⁴⁴ Alternatively, an agency's comparison of costs and benefits can be scored by assessing whether the agency calculated net benefits, which "requires monetized costs and monetized benefits," or a breakeven analysis that establishes

⁴⁴ Hahn & Dudley, *supra* note 39, at 199. For examples of this scoring approach, see, e.g., Hahn & Dudley, *supra* note 39, at 199–200 (finding that "[f]ew RIAs provided both a point estimate and a range" for both costs and benefits); Hahn et al., *supra* note 42, at 867 ("Only 13 percent of the regulations presented both a best estimate and a range of costs."); *see also* OFFICE OF MGMT. & BUDGET, *supra* note 43, at 8–12 (providing monetized point and range estimates of costs and benefits of federal regulations from fiscal years 2004 to 2013).

⁴² Hahn & Dudley, *supra* note 39, at 196. For examples of this "scorecard" approach, see, e.g., U.S. Gov't Accountability Office, GAO-RCED-98-142, Agencies Could Improve DEVELOPMENT, DOCUMENTATION, AND CLARITY OF REGULATORY ECONOMIC ANALYSES 3 (1998,) (reviewing twenty regulatory impact analyses and finding that several failed to "incorporate the best practices set forth in OMB's guidance," such as discussing alternatives and assigning dollar values to benefits); U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-RCED-97-38, AIR POLLUTION: INFORMATION CONTAINED IN EPA'S REGULATORY IMPACT ANALYSES CAN BE MADE CLEARER 2 (1997,) (reviewing twenty-three regulatory impact analyses and finding that several failed to identify "key economic assumptions," "such as the discount rate and the value of human life"); Robert W. Hahn et al., Assessing Regulatory Impact Analyses: The Failure of Agencies to Comply with Executive Order 12,866, 23 HARV. J.L. & PUB. POL'Y 859, 862-77 (2000) (assessing the quality of forty-eight regulatory impact analyses from environmental, health, and safety regulations and finding that information on relevant alternatives and net benefits was not typically provided); Hahn & Dudley, supra note 39, at 196-210 (assessing the quality of seventy-four of the EPA's regulatory impact analyses and finding that "fundamental economic information," such as relevant policy alternatives and net benefits, was not reported most of the time).

⁴³ Hahn & Dudley, *supra* note 39, at 199. For examples of this scoring approach, see, e.g., Jerry Ellig et al., *Continuity, Change, and Priorities: The Quality and Use of Regulatory Analysis across U.S. Administrations*, 7 ReG. & Gov. 153, 158 (2012) (assessing 111 regulatory impact analyses along multiple evaluation criteria, including "[h]ow well . . . the analysis assess[ed] costs and benefits"); Hahn & Dudley, *supra* note 39, at 199–200 (finding that more than ninety percent of regulatory impact analyses monetized at least some costs, while "only about fifty percent monetized at least some benefits"); Hahn et al., *supra* note 42, at 868 ("We found that agencies were less likely to quantify benefits than costs, and rarely monetized benefits."); *see also* OFFICE OF MGMT. & BUDGET, 2014 REPORT TO CONGRESS ON THE BENEFITS AND COSTS OF FEDERAL REGULATIONS AND UNFUNDED MANDATES ON STATE, LOCAL, AND TRIBAL ENTITIES 8–19 (2014), https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/inforeg/inforeg/2014_cb/2014-cost-benefit-report.pdf (discussing monetized estimates of costs and benefits of federal regulations from fiscal year 2004 to 2013); Copeland, *supra* note 19 (analyzing the degree of quantification and monetization in twenty-two independent agency rules and finding that twenty-one out of the twenty-two rules failed to quantify benefits).

a minimum lower bound of benefits necessary to outweigh projected costs.⁴⁵ Yet another approach is to score regulations for compliance with OMB and other statutory requirements—for example, assessing whether agencies have provided a regulatory flexibility analysis or complied with the requirements of OMB Circular A-4.⁴⁶ (Box One summarizes the key elements of costbenefit analysis under OIRA standards.) Lastly, regulatory analysis can be evaluated based on whether risks were evaluated against a normative standard, such as the precautionary principle.⁴⁷

⁴⁵ Hahn & Dudley, *supra* note 39, at 201. For examples of this scoring approach, see, e.g., Jerry Ellig et al., *supra* note 43, at 158 (assessing 111 regulatory impact analyses along multiple evaluation criteria, including net benefits); Hahn et al., *supra* note 42, at 874 ("[A]pproximately half (48 percent) of the forty-eight rules examined in this Article provided no direct measures of net benefits or indirect measures based on cost-effectiveness."); Hahn & Dudley, *supra* note 39, at 201 (finding that most regulatory impact analyses calculated either net benefits or cost-effectiveness, but that few calculated both measures); *see also* WEIMER & VINING, *supra* note 41, at 411–23 (demonstrating how to calculate net benefits and cost-effectiveness using a case study involving an alcohol tax); Sunstein, *The Limits of Quantification, supra* note 29 (advocating for the use of breakeven analysis when dealing with nonquantifiable values); Sunstein, *supra* note 30, at 263 (arguing for the use of breakeven analysis in financial CBA).

⁴⁶ See Copeland, *supra* note 19, at 31–38, 87–91 (identifying analytical requirements for independent agencies and evaluating twenty-two independent agency rules for compliance with those requirements, including regulatory flexibility and paperwork reduction). For more examples of this scoring approach, *see*, *e.g.*, Ellig et al., *supra* note 43, at 157–70 (assessing 111 regulatory impact analyses using twelve criteria based on requirements set out in Executive Order 12866 and OMB Circular A-4); Hahn & Dudley, *supra* note 39, at 205 ("[L]ow scores on our scorecard strongly suggest noncompliance with executive orders and OMB guidelines.").

⁴⁷ See, e.g., James K. Hammitt et al., *Precautionary Regulation in Europe and the United States: A Quantitative Comparison*, 25 RISK ANALYSIS 1215, 1215 (2005) (evaluating regulations for the "relative stringency" with which they addressed a random sample of 100 risks); *see also* Andreas Klinke et al., *Precautionary Risk Regulation in European Governance*, 9 J. RISK RESEARCH 373, 373 (2006) (presenting a model for precautionary risk regulation and discussing various challenges).

BOX ONE: OIRA STANDARDS FOR COST-BENEFIT ANALYSIS

This Box offers a brief overview of the requirements and related guidance that executive agencies must follow when conducting cost-benefit analysis in their rulemakings.

Executive Order 12866 sets out the following cost-benefit principles for executive agencies:

- (5) "When an agency determines that a regulation is the best available method of achieving the regulatory objective, it shall design its regulations in the most cost-effective manner to achieve the regulatory objective. In doing so, each agency shall consider incentives for innovation, consistency, predictability, the costs of enforcement and compliance (to the government, regulated entities, and the public), flexibility, distributive impacts, and equity.
- (6) Each agency shall assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.
- (7) Each agency shall base its decisions on the best reasonably obtainable scientific, technical, economic, and other information concerning the need for, and consequences of, the intended regulation.
- (8) Each agency shall identify and assess alternative forms of regulation and shall, to the extent feasible, specify performance objectives, rather than specifying the behavior or manner of compliance that regulated entities must adopt."⁴⁸

Moreover, for agency actions deemed to be "significant regulatory action[s]" by the OIRA Administrator, Executive Order 12866 also requires that agencies provide the following information to OIRA:

- (i) "An assessment, including the underlying analysis, of benefits anticipated from the regulatory action (such as, but not limited to, the promotion of the efficient 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 and bias) together with, to the extent feasible, a quantification of those benefits;
- (ii) An assessment, including the underlying analysis, of costs anticipated from the regulatory action (such as, but not limited to, the direct cost both to the government in administering the regulation and to businesses and others in complying with the regulation, and any adverse effects on the efficient functioning of the economy, private markets (including productivity, employment, and competitiveness), health, safety, and the natural environment), together with, to the extent feasible, a quantification of those costs; and
- (iii) An assessment, including the underlying analysis, of costs and benefits of potentially effective and reasonably feasible alternatives to the planned regulation, identified by the agencies or the public (including improving the current regulation and reasonably viable nonregulatory actions), and an explanation why the planned regulatory action is preferable to the identified potential alternatives."⁴⁹

⁴⁸ Exec. Order No. 12,866, 58 Fed. Reg. 51,735, § 1(b) (Sept. 30, 1993).

⁴⁹ *Id.* at § 6(3)(C).

Interpreting the above requirements, OMB's Circular A-4 serves as a guidance document to executive agencies "on the development of regulatory analysis as required under Section 6(a)(3)(c) of Executive Order 12866." Circular A-4 sets out the following elements for a "good regulatory analysis": "(1) A statement of the need for the proposed action, (2) An examination of alternative approaches, an (3) An evaluation of the benefits and costs—quantitative and qualitative—of the proposed action and the main alternatives identified by the analysis."⁵⁰

Circular A-4 elaborates on the third element, explaining that in order to "evaluate properly the benefits of regulations and their alternatives," agencies will have to:

- "Explain how the actions required by rule are linked to the expected benefits. For example, indicate how additional safety equipment will reduce safety risks. A similar analysis should be done for each of the alternatives.
- Identify a baseline. Benefits and costs are defined in comparison with a clearly stated alternative. This normally will be a 'no action' baseline: what the world will be like if the proposed rule is not adopted. Comparisons to a 'next best' alternative are also especially useful.
- Identify the expected undesirable side-effects and ancillary benefits of the proposed regulatory action and the alternatives. These should be added to the direct benefits and costs as appropriate."⁵¹

Circular A-4 then presents agencies with the choice between two analytical approaches: benefit-cost analysis and cost-effectiveness analysis. Although both approaches should be used in "a major rulemaking . . . wherever possible," Circular A-4 does specify that cost-effectiveness analysis should be used in "all major rulemakings for which the primary benefits are improved public health and safety to the extent that a valid effectiveness measure can be developed to represent expected health and safety outcomes," while benefit-cost analysis should be used "to the extent that valid monetary values can be assigned to" those outcomes.⁵²

"For all other major rulemakings" that do not concern improved health and safety, Circular A-4 directs agencies to use benefit-cost analysis, unless: (a) some of the "primary benefit categories cannot be expressed in monetary units," in which case cost-effectiveness analysis should also be used; or (b) neither benefits nor costs can be quantified, in which case the agency should provide "a qualitative discussion."⁵³

⁵⁰ OFFICE OF MGMT. & BUDGET, CIRCULAR A-4 REGULATORY ANALYSIS 2 (2003), https:// www.whitehouse.gov/sites/whitehouse.gov/files/omb/circulars/A4/a-4.pdf.

⁵¹ *Id.* at 2–3.

⁵² *Id.* at 9.

⁵³ Id. at 9–10.

Circular A-4 goes on to provide specific protocols for presenting the results of a cost-benefit analysis:

- "include separate schedules of the monetized benefits and costs that show the type and timing of benefits and costs, and express the estimates in this table in constant, undiscounted dollars . . .
- list the benefits and costs you can quantify, but cannot monetize, including their timing;
- describe benefits and costs you cannot quantify; and
- identify or cross-reference the data or studies on which you base the benefit and cost estimates."⁵⁴

Lastly, Circular A-4 also directs agencies to include in their analyses "other benefit and cost considerations" when "they are significant":

- "Private-sector compliance costs and savings;
- Government administrative costs and savings;
- Gains or losses in consumers' or producers' surpluses;
- Discomfort or inconvenience costs and benefits; and
- Gains or losses in time in work, leisure, and/or commuting/travel settings."⁵⁵

There is also a fair amount of variation in the methods used to establish categories for making comparisons as to the quality of regulatory analysis. For example, comparisons have been made between agencies within a jurisdiction or between groups of agencies, such as independent agencies versus those overseen by OMB.⁵⁶ Alternatively, the nationality of regulatory bodies, such as U.S. agencies versus European agencies, has provided a basis for comparison.⁵⁷ Another approach has been to make comparisons based on the type of risk assessed, such as specific environmental or health risks.⁵⁸ Fi-

⁵⁸ See, e.g., Hammitt et al., *supra* note 47, at 1216–17 (describing the study's development of a matrix of almost 11,000 unique risks for assessing regulations).

⁵⁴ Id. at 18.

⁵⁵ Id. at 37.

⁵⁶ See, e.g., Copeland, *supra* note 19, at 8 ("The primary objective of this report is to assess the extent to which independent regulatory agencies currently prepare cost-benefit and other types of economic analyses in connection with the issuance of their 'economically significant' or 'major' rules.") (footnotes omitted); Hahn et al., *supra* note 42, at 861 (describing how the study was based on an evaluation of forty-eight RLAs from executive agencies in the "environmental, health, and safety" fields); Hahn & Dudley, *supra* note 39, at 197 ("The sample used in this study consists of a total of seventy-four RLAs... the EPA was selected because it accounts for a majority of all available regulatory analyses and more than half of the total costs of regulation.") (citations omitted).

⁵⁷ See, e.g., Caroline Cecot et al., An Evaluation of the Quality of Impact Assessment in the European Union with Lessons for the US and the EU, 2 REG. & Gov. 405, 406 (2008) (using United States impact assessments "as a benchmark" for evaluating European impact assessments); Hammitt et al., *supra* note 47, at 1216 ("The objective of our research was to accurately characterize the observed pattern of relative precaution in U.S. and European risk regulation."); Ragnar E. Löfstedt & David Vogel, *The Changing Character of Regulation: A Comparison of Europe and the United States*, 21 RISK ANALYSIS 399, 399 (2001) (arguing that European consumer and environmental regulatory regimes have "become stricter" since the 1980s while their United States counterparts have not).

nally, comparisons have been made based on areas of regulation, such as the environment or health generally.⁵⁹

The current paper presents a scoring framework that draws heavily on these prior efforts but also adds a unique dimension of analysis. To begin with what is unique: our approach to benefit analysis is based on a taxonomy organized around market failures and other perceived shortcomings in consumer outcomes, including unfairness,60 which regulatory interventions purport to address. We supplement this scoring of purported market shortcomings with additional information on the degree of quantification and monetization of benefit analysis in a manner similar to Hahn and Dudley,⁶¹ but we also score regulations based on other kinds of information-such as intensity of analysis, reliance on expert sources and word counts-that have typically not been tracked. In terms of categories used for comparison, we follow the conventional approach of collecting and comparing regulatory scores by agencies (with a special emphasis on CFPB regulations) while also offering comparisons across groups of agencies (typically independent versus OIRA agencies), across types of regulations (typically consumer financial protection versus other kinds of consumer protection), and across differences in governing laws (such as whether a are or are not required to conduct additional analysis under the Regulatory Flexibility Act or the Congressional Review Act).

C. A Preliminary Synthesis

In organizing what is becoming an increasingly unwieldy literature on cost-benefit analysis, we find it helpful to distinguish two dimensions. The first, located on the horizontal axis of Figure One, concerns the range of analytical techniques being employed, conventionally running from qualitative analysis to quantitative analysis to monetized analysis.⁶² The second di-

⁵⁹ See, e.g., *id.* at 1218 ("We . . . categorized the risks according to whether they affect ecological, health, or safety endpoints."). This approach is sometimes called "endpoint" analysis.

⁶⁰ Our scoring of distributional considerations within the category of fairness is in tension with the preferences of some policy analysts working in this area. *See, e.g.*, Aanund Hylland & Richard Zeckhauser, *Distributional Objectives Should Affect Taxes but Not Program Choice or Design*, 81 SCANDINAVIAN J. ECON. 264, 264 (1979) (arguing that "those projects that yield the greatest total of unweighted benefits across the population should be selected" and that redistribution should be "carried out solely through the tax system").

⁶¹ See supra note 43 and accompanying text.

⁶² Another important strain of academic work in this area, with which we do not directly engage, is the consideration of whether cost-benefit analysis should use a non-monetary metric, such as aggregate utility, which might better map into a morally defensible social utility function. For an illuminating defense of this alternative approach, see Matthew Adler, *A Better Calculus for Regulators: From Cost-Benefit Analysis to the Social Welfare Function* (Duke Envtl. and Energy Econ. Working Paper Series, Paper EE 17-01, March 2017), http:// sites.nicholasinstitute.duke.edu/environmentaleconomics/files/2017/03/WP-EE-17-01.pdf. For a helpful exploration of the relative merits of traditional forms of cost benefit analysis (built around monetary estimates of changes in consumer and producer surpluses) as opposed to

mension, located on the vertical axis of Figure One, relates to the standard of assessment required of the government body evaluating a new rule or some other course of action. Cost-benefit analysis can be entirely discretionary on the part of the agency—the most lax kind of requirement. Or there can be a requirement that an agency consider costs or both costs and benefits. More stringent regimes require break-even analysis or some sort of net benefit assessment, or even a fully monetized benefit assessment.⁶³

On this simple, two-dimensional mapping, one can locate various approaches. In Germany, for example, administrative agencies are required to consider costs (but not benefits) in adopting new regulations and have a fair amount of latitude in employing a range of analytical techniques.⁶⁴ In the United States, executive agencies subject to OIRA oversight are generally required to make a "net benefit assessment" for new regulations and are encouraged to quantify and monetize costs and benefits to the extent feasible.⁶⁵ The CFPB, in contrast, operates under a general statutory mandate requiring only the consideration of costs and benefits in the adoption of new regulations, and it follows a practice of engaging in quantitative and monetized analysis where feasible.⁶⁶

more sophisticated utilitarian approaches, see CASS R. SUNSTEIN, THE COST-BENEFIT REVOLU-TION 39–77 (2018). *See generally* Richard Revesz, *Regulation and Distribution*, 93 N.Y.U. L. REV. 1489 (2018) (exploring reforms to incorporate elements of distributional analysis into administration decision-making at the federal level). Our analytical framework does, however, relate to distributional analysis to the extent that we do consider whether agencies used the concept of fairness as a justification for the adoption of the rules in our sample.

⁶³ One could easily imagine providing additional levels of gradation to Figure One, for example specifying with greater detail the standards for monetizing both costs and benefits, perhaps eliminating transfers or imposing some other restrictions on analysis.

⁶⁴ See National Council for the Review of Legal Norms, §§1(3), 2 (Ger.), http://www.gesetze-im-internet.de/nkrg/BJNR186600006.html.

⁶⁵ See infra Box Two.

⁶⁶ Id.

	Qualitative Analysis	Quantitative Analysis	Partially Monetized Analysis	Fully Monetized Analysis	
"Discretionary" "Consideration of Costs" "Consideration of Costs & Benefits" "Break-Even Analysis" "Net Benefit Assessment" "Net Benefit Assessment"	Require Standar Standar Assessme	d	lytical Techi	niques	Authoritative Assessment of Compliance: Agency, OIRA, Courts, or Other Institutional Arrangements (Under Some Standard of Review)

FIGURE ONE - MAPPING COST-BENEFIT ANALYSIS

An additional dimension of differentiation—represented by the column to the extreme right-hand side of Figure One—relates to an issue of institutional design: what body has authority to decide whether an agency has complied with its obligations to engage in cost-benefit analysis. That could be left to the discretion of the agency itself, as seems to be the case in Germany.⁶⁷ It could fall to another governmental body, such as OIRA for executive agencies. The responsibility could lie with the courts, as suggested by *Business Roundtable* and related cases.⁶⁸ Some recent academic commentators have also suggested other institutional arrangements, such as a new oversight body for financial CBA or a panel of outside academic experts.⁶⁹

The financial CBA skeptics, discussed above in Part I.A, can be understood to be arguing that, because the analytical techniques located on the right-hand side of the horizontal access of Figure One are not yet available, it does not make sense to impose a rigorous standard of assessment—that is, move down the vertical axis of Figure One—or to enlist courts for authoritative review. The defenders of financial CBA are more sanguine about the availability of more rigorous analytical techniques, but also generally take the position that only by imposing more stringent standards of assessment (moving down the vertical axis of Figure One) and empowering external bodies, like the courts or OIRA, will agencies invest in analytical techniques required for more sophisticated quantification and monetization of costs and benefits.⁷⁰

⁶⁷ National Council for the Review of Legal Norms, §§1(3), 2 (Ger.).

⁶⁸ Business Roundtable v. SEC, 647 F.3d 1144, 1148 (D.C. Cir. 2011).

⁶⁹ See supra note 32.

⁷⁰ See, e.g., Bubb, *supra* note 32. Interestingly, one of the leading skeptics of financial CBA has expressed enthusiasm for independent external assessment of financial CBA on the

The goal of the current study is to investigate how regulatory authorities currently conduct benefit analysis in consumer financial protection regulation and analogous regulatory fields. We explore which kinds of benefits these consumer protection regulations purport to provide and-within the framework of Figure One-how far along the horizontal axis their benefit analyses are located. This study bears on the debate between financial CBA enthusiasts and skeptics in that it offers a more comprehensive study of the quality of benefit analysis in this area of financial regulation than has heretofore been attempted. To the extent that the courts are moving towards a standard of judicial review that requires financial regulators to justify new regulations based on what might be called "best practices" in the field of cost-benefit analysis,⁷¹ our study offers a plausible summary of the current quality of cost-benefit analysis in consumer finance and analogous areas of consumer protection. Finally, and perhaps most importantly, the analysis that follows suggests where additional academic work would be most useful for improving financial cost-benefit analysis in the future. Developing a research agenda for the analysis of benefits in consumer financial protection regulation is implicit in much of the discussion that follows and is taken up directly in Part V below.

II. OVERVIEW OF SURVEY DESIGN STRUCTURE

We now turn to an overview of our survey design and implementation strategy. The results of the survey are reported in Part III and Part IV. As the CFPB is the source of one of our key samples, we include in Box Two an Overview of CFPB Statutory Requirements Related to Cost-Benefit Analy-

grounds that it would allow for useful cross-agency comparisons and encourage the development of new and better analytical techniques. *See* Coates, *supra* note 26, at 1009 ("Conceptual CBA involves a common language and mode of thought that could facilitate interagency dialogue by floating above any one statutory mandate or set of agency-specific regulatory goals ... Thinking through conceptual CBA for a rule can lead to novel insights about how the rule is (or is not) similar to rules issued by other agencies, or how it might generate unintended consequences . . . [C]onceptual CBA/FR can facilitate improvements in quantified CBA/ FR.").

⁷¹ The state of this law in this area is unclear and may vary from agency to agency depending on the statutory standard under which the agency is acting. Some recent cases could be read to suggest that a statutory requirement for financial CBA establishes something like a best practices standard. For example, in *Business Roundtable*, the D.C. Circuit wrote "[t]he [SEC] also has a 'statutory obligation to determine *as best it can* the economic implications of the rule." 647 F.3d at 1148 (emphasis added) (quoting Chamber of Commerce v. SEC, 412 F.3d 133, 143 (D.C. Cir. 2005); *see* Chamber of Commerce v. SEC, 412 F.3d 133, 145 (D.C. Cir. 2005) ("The Commission may ultimately decide the disclosure alternative will not sufficiently serve the interests of shareholders, but the Commission—not its coursel and not this court—is charged by the Congress with *bringing its expertise and its best judgment* to bear upon that issue.") (citations omitted) (emphasis added); *see also* R.J. Reynolds Tobacco Co. v. FDA, 696 F.3d 1205, 1222 (D.C. Cir. 2012) (suggesting regulatory action not warranted because the agency failed to show that "enacting their proposed graphic warnings [on cigarette packages] will accomplish [its] stated objective of reducing smoking rates").

account for the fact that individuals with clearer information may also make better choices. In addition, the DOL rule assumes the amount of time that plan participants may save while the DOT rule makes a key assumption regarding the number of online purchasers who search multiple websites.

In the remaining nine exemplars, the agencies use broad measure of benefits and relied on quantitative assumptions rather than observations or inferences from data in order to complete the analyses. These rules are described above, but by way of illustration, the rule on tire fuel efficiency (DOT)³⁸³ measures benefits by fuel saved and reduced greenhouse gas emissions but assumes increased number of tires that would be purchased with reduced rolling resistance. The rule reestablishing the emergency homeowners' loan program (HUD)³⁸⁴ measures benefits by the value of foreclosures avoided but assumes the reduction in the probability of foreclosure. The rule on mortgage loan servicing (CFPB)³⁸⁵ measures benefits by the cost savings from reduced force-placed insurance but assumes the extent to which force-placed insurance is reduced.

Overall, we find that our exemplars use broad benefit metrics over narrow ones (twelve compared to four) and rely relatively more on quantitative assumptions with broad benefit metrics (nine of twelve compared to two of four). While we can only speculate on these patterns, it is perhaps reasonable to suppose that they reflect a basic dilemma. Agencies might generally prefer to use a broad benefit metric over a narrow one. It is more challenging, however, to quantify benefits with a broad metric. Further, in balancing breadth and quantification, agencies may face different constraints in their willingness or ability to utilize quantitative assumptions. At least with our selected group of exemplars, the balance favors broad benefit metrics and quantitative assumptions.

V. PRELIMINARY CONCLUSIONS AND PATHS FOR FUTURE RESEARCH

We began by presenting an operationally useful and (relatively) parsimonious taxonomy for regulatory benefit analysis. The taxonomy is grounded in the traditional sources of market failure, but is expanded to allow for benefits based on behavioral biases, problems of fairness and inequality, and the practical needs of agencies to clarify statutory mandates or develop business-to-business standards with fairly direct benefits to consumers. We established that independent researchers, reading the same benefit analyses across seventy-two selected regulations, generally identified the same type of benefit (that is, component of the taxonomy) and that all significant benefits asserted by agencies could be classified.

³⁸³ Supra notes 177–184 and accompanying text.

³⁸⁴ Supra notes 202–216 and accompanying text.

³⁸⁵ Supra Part IV.C.5.

The regulations selected for study address challenges to consumer decision-making and welfare, including tradeoffs in benefits and risks to consumers, that generally motivate the regulations issued by agencies with a formal consumer protection mandate. By controlling for subject matter, our expectation was that these analyses would face analogous challenges and might therefore be informative in regards to the potential characteristics of the impact analyses for consumer protection and consumer financial protection regulations generally. The shared characteristics of the exemplars include an emphasis on a particular benefit and high quantification effort. Exemplars also tend to rely on expert sources and have high word counts. These features of regulatory impact analyses have typically not been tracked in other studies.

Our quantitative findings reveal certain similarities and differences between the benefit analyses performed by the Executive Branch agencies subject to OIRA review and the independent agencies (and sometimes in contrast to those of the CFPB). Given the basis on which we selected rules, it is reassuring that all agencies cite addressing information problems as the most common benefit. Among the more prominent differences, the OIRA agencies (along with the CFPB) cite the reduction of cognitive biases as a benefit more frequently than do the other agencies.³⁸⁶ Conversely, regulations intended to facilitate adjustments to existing legal baselines (for example, to promote clarity and facilitate compliance) figure more prominently for the independent agencies (including the CFPB) than for the OIRA agencies.³⁸⁷ Negative externalities are infrequently cited by the CFPB compared to all the other agencies,³⁸⁸ and the precise reason for this difference requires further study.

As expected, the benefits analyses by the OIRA agencies showed greater quantification effort than did those by the independent agencies.³⁸⁹ For example, both the median and mean quantification effort scores of the highest scoring benefit in each rulemaking by the OIRA agencies and the independent agencies were higher for the OIRA agencies.³⁹⁰ The scores were also high in absolute terms, 2.91 out of 5 for the mean and 4 out of 5 for the median.³⁹¹ While this may not be surprising given the emphasis on quantification and monetization in Executive Order 12866 and Circular A-4, it does point toward the need for deeper examination of the differences and what, exactly, the OIRA agencies are measuring.

³⁸⁶ See supra Figure 4.

³⁸⁷ Id.

³⁸⁸ See supra Figure 7.

³⁸⁹ To a lesser degree, but also notably, where regulations in the sample were subject to certain heightened procedural requirements of the Congressional Review Act or Regulatory Flexibility Act, the benefit analysis for those regulations received higher scores. *See supra* notes 109–110 and accompanying text.

³⁹⁰ See supra Table 6.

³⁹¹ Id.

The analysis of twenty exemplars of benefits analysis takes an initial step toward this more granular analysis. As discussed above, the exemplars were chosen largely on the basis of the Quantification Scores.³⁹² Consistent with the previous results, fifteen of the twenty are the work of OIRA agencies, and only one of the twenty is by an independent agency and has a high Quantification Score. However, while the OIRA agencies undertake great efforts to measure the difference in the number of entities or transactions covered by current practices and proposed requirements, and trace the impact of narrowing the difference on measures correlated with consumer welfare, the actual impact of the proposed requirements on the gap is often the subject of speculation. Further, while we do not view this result to be surprising, we do believe it is worth considering carefully the fact that the highest scoring analyses according to our objective measures are nevertheless limited in this way. We also find that the missing information is frequently in regards to the direct impact of the new requirements, such as how consumers will respond to additional information, a subsidy, or advice; or how businesses will respond to a new opportunity for which a legal framework is being established. Thus, the estimated benefit often incorporates an upper bound, a scenario, or the midpoint of a range for which the empirical foundation is largely if not entirely hypothetical.³⁹³

These preliminary comments are in no way intended to minimize the accomplishments in measurement demonstrated by the exemplars or the value of these efforts. We recognize that breakeven analyses, using ranges of benefits, can sometimes show that the benefits exceed the cost. Where the missing information is largely if not entirely hypothetical, however, this conclusion rests on the same foundation as the missing information itself and is equally speculative. The conclusion therefore needs to be interpreted in this light. We also find that while the exemplars generally use broad and intuitive measures of benefits, there are exceptions, and in any case a more formal derivation of these measures might reveal strengths and limitations that are not immediately apparent. We encourage others to review the exemplars carefully, consider the current limits in the abilities of most agencies to measure the benefits of consumer protection rulemakings, and assess the policymaking value of advancing the frontier in measuring these benefits.

In terms of sketching out a path forward, we offer the following preliminary thoughts on practical steps that will improve benefits analysis in consumer financial regulation.

³⁹² Supra Part IV.B.

³⁹³ While our primary focus in this article is on regulatory practice and potential improvements thereof, the analysis does suggest that when courts are called upon to review the quality of benefits analysis of consumer protection regulations under the Administrative Procedure Act or otherwise, *see supra* notes 13–14, 71 and accompanying text, an appreciation of the limitations of current best practices may be helpful.

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A. Best Practices for Articulating Benefits of Financial CBA

Our first set of recommendations concerns the manner in which regulatory officials articulate expected benefits in financial CBA. We focus here solely on the communication of benefit analysis in public documents and not on internal procedures and practices.

While our survey design was reasonably successful in placing asserted benefits into our taxonomy of expanded Campbell factors, the textual discussions of benefits were in some cases ambiguous. Going forward, it would be preferable, when feasible, if agencies were to specify more clearly and consistently the channel of market correction through which it envisions each asserted benefit will operate. This practice would be especially useful where benefits are now simply characterized as improving consumer welfare or market efficiency. To the extent that agencies could also be more parsimonious in identifying benefits or at least distinguish what are thought to be the more economically significant benefits, this would also be helpful in identifying the most significant expected effects of new regulations and also suggest where further quantification and monetization of benefits would be most valuable.

In cases where regulations are envisioned as having measurable effects on specific endpoints—like the number of foreclosures or dispersion of fees—offering either a point estimate of the predicted effect or, if appropriate, providing a range of possible effects, could be extremely helpful for several reasons. Offering such endpoint estimates would both more clearly communicate to the general public the intended impact of new regulations and also offer a standard against which retrospective analysis of the regulation might be measured.³⁹⁴ This would provide a feedback mechanism for improvements in benefits analyses going forward.

Finally, on a more technical level, where agencies produce regulatory impact analyses in documents separate from their Federal Register releases (as is often the case with agencies subject to OIRA review) or in other background documentation, it would be useful to clarify which benefits asserted in a Federal Register notice were supported by quantitative analysis in the regulatory impact analysis or other documents and which were not. Additionally, to the extent possible, including direct links to underlying documents would facilitate independent reviews of financial CBA, such as this current study.

³⁹⁴ A separate issue—for future consideration—is whether when a new regulation is part of a suite of related initiatives—as was true of the handful of new mortgage regulations that CFPB adopted in early 2013—such endpoint projections might best be articulated as the result of a combination of agency actions. Though estimating cumulative effects would raise complicated legal and technical issues, the approach would be better suited to retrospective analysis when effects of individual regulations may be difficult to detect. *See supra* note 41 and accompanying text.

B. Addressing the Centrality of Disclosure Strategies

Given the prominence of disclosure strategies in consumer protection efforts at both the CFPB and other agencies charged with consumer protection responsibilities, we believe that disclosure is a logical target for additional research and analysis.³⁹⁵

Comprehension versus Changes in Behavior. Benefit analysis for disclosure regulations is often ambiguous as to whether the goal of the intervention is simply to increase consumer comprehension or rather to change behavior by eliminating the mistaken or otherwise inappropriate choices. The latter course is, no doubt, more problematic because it requires regulatory officials to have a normative framework to define which choices are correct for which consumers. But improved comprehension without accompanying changes in behavior does not necessarily generate personal or social benefits. Additional research into the conditions under which improved comprehension might appropriately be deemed beneficial—either as an independent value or as a reliable proxy for desirable changes in behavior—would be extremely useful. Even more useful—though likely a good deal more challenging to produce—would be models identifying correct and incorrect consumer choices.

Heterogeneity of Consumers. Perhaps more tractable in the short-term would be an investigation into the heterogeneity of consumers. Many regulations covered in our survey noted the cognitive limitations of some consumers;³⁹⁶ others identified information asymmetries increasing search costs for other populations.³⁹⁷ Additional research into the heterogeneity of consumers and consumer responses in at least some consumer financial markets could provide valuable inputs to benefits analyses in other areas. While research of this sort could be undertaken in a number of different ways, more empirical results drawn from surveys, testing, observational studies, and pilot programs would be most welcome.

Role of Supplier Responses and Third Party Reactions. A number of benefit analyses speculated as to supplier responses and third-party interactions to disclosure. For example, the mechanism whereby some disclosures are supposed to be effective is not through direct consumer responses, but rather through supplier adjustments in anticipation of consumer reactions (or possibly fear of regulatory sanction). In other situations, disclosure requirements are not intended for direct consumer use, but rather for consumer use through the filter of third-party information intermediaries (such as iPhone

³⁹⁵ In some of this research, it may be useful to distinguish among disclosure strategies based on the channel of market correction. As reflected above in Table 8, some information asymmetries are associated with problems of market power, while others are associated with public goods and yet others associated with cognitive biases. Conceivably, research useful for benefit analyses of disclosure strategies might also differ along these lines.

³⁹⁶ Supra Part IV.D.1.

³⁹⁷ Supra Part IV.C.1.

apps and other validation systems). Research defining the conditions under which these supplier responses and third-party effects are most likely to be effective (and the extent of their effects) could also be useful.

Impact of Disclosure on Prices. A number of disclosure strategies are premised on their predicted effects on consumer prices, either due to reduced search costs or the compression of price dispersion through a reduction in price discrimination. Documenting the extent of such price changes from past improvements in disclosure could provide useful inputs for benefit analyses of future disclosure strategies with similar goals.

Relative Merits of Alternative Strategies. For the most part, the benefit analyses in our survey focus on disclosure in isolation,³⁹⁸ but in practice disclosure typically is just one of several possible policy options. Other commonly considered alternatives include default rules, prescriptive regulations, or enforcement strategies. Research designed to offer a rough handle on the relative efficacy of these alternative approaches in certain areas of consumer protection could enhance regulatory analysis, especially where the costs of different alternatives vary considerably but the likely benefits are less sensitive to the choice of approaches.

C. Development of New Metrics for Consumer Financial Protection

In investigating the current state of benefits analyses in financial CBA, one cannot but cast an envious eye on the environmental arena, where CBA experts have developed consensus (if not wholly uncontroversial) views on the statistical value of lives or the social cost of carbon. One could imagine the development of a similar new metric for consumer financial protection. We conclude with two possible lines of investigation.

Value of Bankruptcy Avoidance/Foreclosure Avoidance/Reduced Financial Stress. Many consumer financial protection regulations are designed to avoid financially adverse consequences, such as bankruptcy, foreclosure, or some sort of financial distress that falls short of bankruptcy. Though not the equivalent of financial death, these conditions might be considered analogous to financial morbidity, and it is conceivable that careful research might produce estimates of the value of their avoidance, perhaps even producing benefit estimates that vary with the age of the individual in question. While it is conceivable that any agency could undertake such an investigation in the context of a single regulatory initiative, one could imagine that—were consensus estimates to be produced—those estimates would be useful in the evaluation of numerous different regulatory initiatives.

Valuing Certain Transfers. Many consumer financial protection regulations include benefits that consist of reducing prices paid by consumers to producers. While these benefits may be entirely appropriate considerations for an agency such as the CFPB with a specific mandate to protect consum-

³⁹⁸ Supra Part IV.C.1.

ers, transfers from consumers to producers, in and of themselves, are typically not understood to produce economic benefits—although sometimes such transfers are classified as benefits in benefit analyses in our surveyed regulations. Additional research into when and how such transfers should qualify as economic benefits would be another fruitful research project and one that could also have application in benefit analyses in the future. There is, for example, literature on valuing theft reduction and charitable contributions, both of which may provide helpful analogies. Alternately, to the extent transfers move certain individuals away from financial distress, the value of this reduction might be utilized. Lastly, the insurance value of risk reduction might also be estimated in certain contexts.

D. Incentivizing Estimates over Quantitative Assumptions When Justified

In our summary of findings from the analysis of exemplars, we noted that many of the most quantitative analyses achieved this outcome via important quantitative assumptions.³⁹⁹ We offer two tentative conclusions from this finding. First, notwithstanding the challenges to quantifying the benefits of consumer protection regulations-which may be especially great for consumer financial protection regulation-agencies will likely find a way to assign numbers to regulatory outcomes if required to do so. We suggest, however, that improvements in benefit analysis require appropriate investments in data and modeling. These investments, which could include randomized controlled trials and field experiments where the key uncertainty is about direct responses to new disclosures or requirements, would lead to data-driven estimates of key impacts instead of quantitative assumptions. These investments, however, would only be justified when the costs or other stakes in the rulemaking were sufficiently great. Both quantitative assumptions and estimates have an important place in quantified benefit analysis. The incentives for greater quantification should not be so broad that they generally incentivize one over the other but should incentivize the one that is more justified in any given regulatory analysis.

Finally, our finding on the use of quantitative assumptions over estimates provides a suggestion to other researchers on the quality of analysis of regulatory benefits. When scoring these analysis, it is useful—even if challenging—to consider how the quantification is achieved and not only whether there is more or less of it. This data would be generally useful, and essential in the long run for understanding whether the relative use of quantitative assumptions and estimates advances the purposes of regulatory impact analysis.

³⁹⁹ Supra Part IV.E.

E. Institutional Innovations to Promote Better Benefit Analysis

As our survey reveals, regulatory agencies already rely on academic and government studies to a considerable degree in producing regulatory impact analyses for consumer protection regulations.⁴⁰⁰ More attention could, however, be given to encouraging prospectively the development of new studies designed to generate estimates of parameters of particular interest, such as issues highlighted in sections B and C of this Part V. Targeted research projects for internal research staff or external academics are one possibility as are academic conferences or prizes focused on topics of particular interest.⁴⁰¹ In certain areas with overlapping interests, inter-agency collaborations across research departments could also be productive. No doubt other approaches are possible. But as this Article demonstrates, the benefit analysis in the field of consumer protection is a complicated exercise that ideally incorporates a number of estimates of consumer and market responses to public interventions. In many instances, the work required to produce these estimates depends upon independent research that is best pursued outside of the regulatory process itself.

 $^{^{400}}$ See supra note 107 and Part IV and accompanying text (discussing numerous studies cited in exemplars).

⁴⁰¹ Another complementary approach, available to external scholars and students, would be to undertake detailed evaluations and critical assessments of recent regulatory impact analyses involving consumer protection issues. The *Harvard Business Law* Review recently published online a pair of student-written pieces illustrative of this kind of work. See Marlan Golden, *Health Insurance Plan Regulation after the Affordable Care Act: A Cost-Benefit Analysis Comparison*, 9 HARV. BUS. L. REV. ONLINE (2018–19), https://www.hblr.org/wp-content/ uploads/sites/18/2019/05/Golden-Formatted.pdf (offering a critical assessment of regulatory impact analyses for two regulations promulgated under the Affordable Care Act: the first an ACA-mandated rulemaking under the Obama Administration and the second a deregulatory rulemaking under the Trump Administration); Andrew Palmer, *The CFPB Arbitration Rule*, 9 HARV. BUS. L. REV. ONLINE (2018–19), https://www.hblr.org/wp-content/uploads/sites/18/ 2019/05/HBLR-Online_Palmer.pdf (presenting a largely positive assessment of the CFPB's regulatory impact analysis but also offering suggestions as to how the Bureau's analysis could have been better communicated to the public).

Appendix One: List of Regulations Surveyed

Entry	2012025	File Name OriginalRemittanceRule - FINAL	Agency CFPB	Mandate Category CFPB Mandate	Date (FR) 2/7/2012	Fed Reg 77 Fed. Reg. 6.194 – 6.309
		OriginalRemittanceRule - FINAL DefiningConsumerReporting - FINAL	CFPB	CFPB Mandate CFPB Mandate	7/20/2012	77 Fed. Reg. 6,194 - 6,309 77 Fed. Reg. 42,874-42,900
		SafeHarborRemittance - FINAL	CEPB	CFPB Mandate	8/20/2012	77 Fed. Reg. 50,244- 50,279
		DefiningConsumerDebtCollection - FINAL	CFPB	CFPB Mandate CFPB Mandate	10/31/2012	77 Fed. Reg. 65,775- 65,799
		EscrowRequirements - FINAL	CFPB	CFPB Mandate CFPB Mandate	1/22/2013	78 Fed. Reg. 4,726-4,757
			CEPB			
		AbilitytoRepayTILA - FINAL	CFPB	CFPB Mandate	1/30/2013	78 Fed. Reg. 6,048-6,620
		HighCostMortgageCounseling - FINAL		CFPB Mandate	1/31/2013	78 Fed. Reg. 6,856-6,975
		RegBAppraisalsandValuations - FINAL	CFPB	CFPB Mandate	1/31/2013	78 Fed. Reg. 7,216-7,247
		TILAAppraisals - FINAL	CFPB	CFPB Mandate	2/13/2013	78 Fed. Reg. 10,368 - 10,447
		RESPA RegX - FINAL	CFPB	CFPB Mandate	2/14/2013	78 Fed. Reg. 10,696 - 10,899
		TILAMortgageServicing - FINAL	CFPB	CFPB Mandate	2/14/2013	78 Fed. Reg. 10,902 - 11,021
		FOIADisclosures - FINAL	CFPB	CFPB Mandate	2/15/2013	78 Fed. Reg 11,484 - 11,520
		LoanOrigComp - FINAL	CFPB	CFPB Mandate	2/15/2013	78 Fed. Reg. 11,280 - 11,427
		ATM Disclosures - FINAL	CFPB	CFPB Mandate	3/21/2013	78 Fed. Reg. 18,221-18,224
		TILARegZ (CreditCard) - FINAL	CFPB	CFPB Mandate	3/22/2013	78 Fed. Reg. 18,795-18,798
		ElectronicFundTransfers - FINAL	CFPB	CFPB Mandate	5/22/2013	78 Fed. Reg. 30,662-30,721
		AbilitytoRepayRegZ - FINAL	CFPB	CFPB Mandate	6/12/2013	78 Fed. Reg. 35,430-35,506
		ECOAMortgageRulesRESPATILA- FINAL	CFPB	CFPB Mandate	10/1/2013	78 Fed. Reg. 60,382-60,451
19 CFPB -	20131231 -	Integrated Mortgage Disclosures - FINAL	CFPB	CFPB Mandate	12/31/2013	78 Fed. Reg. 79,730 -80,365
20 CFTC -	20111118 -	PositionLimits - FINAL	CFTC	Statutory Mandate	11/18/2011	76 Fed. Reg. 71,625 - 71,706
21 CFTC -	20120224 -	CPO CTA Reqs - FINAL	CFTC	Statutory Mandate	2/24/2012	77 Fed. Reg. 11,251 - 11,344
22 CFTC -	20120612 -	SDR Reqs - FINAL	CFTC	Statutory Mandate	6/12/2012	77 Fed. Reg. 35,199 - 35,239
23 CFTC -	20120719 -	EndUserException - FINAL	CFTC	Statutory Mandate	7/19/2012	77 Fed. Reg. 42,559 - 42,591
24 CFTC -	20120905 -	CPO CTA Amendments - FINAL	CFTC	Statutory Mandate	9/5/2012	77 Fed. Reg. 54,355 -54,360
25 CFTC -	20130117 -	ExemptiveOrder - FINAL	CFTC	Statutory Mandate	1/17/2013	78 Fed. Reg. 858 - 882
		GuidelinesMandatoryRecall - FINAL	CPSC	No Mandate	1/21/2010	75 Fed. Reg. 3,355-3,371
27 CPSC -	20101209 -	PubliclyAvailableDatabase - FINAL	CPSC	No Mandate	12/9/2010	75 Fed. Reg. 76,831-76,872
28 DOE -	20110627 -	ACHeatPumps - FINAL	DOE	OIRA 12866	6/27/2011	76 Fed. Reg. 37,407-37,548
29 DOE -	20100416 -	WaterHeaters - FINAL	DOE	OIRA 12866	4/16/2010	75 Fed. Reg. 20,111-20,236
30 DOE -	20110915 -	RefrigeratorStandards - FINAL	DOE	OIRA 12866	9/15/2011	76 Fed. Reg. 57,516-57,612
31 DOJ - 2	20100915 - 1	Nondiscrimination - FINAL	DOJ	OIRA 12866	9/15/2010	75 Fed. Reg. 56,236-56,358
		Investment Advice - FINAL	DOL	OIRA 12866	10/25/2011	76 Fed. Reg. 66,136-66,167
		IndividualAccountPlans - FINAL	DOL	OIRA 12866	10/20/2010	75 Fed. Reg. 64,910-64,946
		GHG and Fuel Economy - FINAL	DOT/EPA	OIRA 12866	10/15/2012	77 Fed. Reg. 62,624-63,200
		NewEntrantSafetyAssurance - FINAL	DOT	OIRA 12866	12/16/2008	73 Fed. Reg. 76,472-76,497
		MortgageOrigination - FINAL	FRB	No Mandate	9/24/2010	75 Fed. Reg. 58,509 - 58,538
		NonBankDefinitions - FINAL	FRB	No Mandate	4/5/2013	78 Fed. Reg. 20,755 - 20,781
		SIMarketUtilities - FINAL	FSOC	OIRA 12866	7/18/2011	76 Fed. Reg. 44,763 - 44,776
		NonBankSupervision - FINAL	FSOC	OIRA 12866	4/3/2012	77 Fed. Reg. 21,637 -21,662
		MortgageAssistanceRelief - FINAL	FTC	No Mandate	12/1/2010	75 Fed. Reg. 75,092-75,144
		ConsumerReportingAccuracy - FINAL	000	OIRA 12866	7/1/2009	74 Fed. Reg. 31,484-31,528
		dentityTheft - FINAL	FTC	No Mandate	12/6/2012	77 Fed. Reg. 72,712-72,715
		PatientSafetyOuality - FINAL	HHS	OIRA 12866	11/21/2008	73 Fed. Reg. 70,732-70,814
		WarningsCigarettePackages - FINAL	HHS	OIRA 12866	6/22/2011	76 Fed. Reg. 36,628-36,777
			HUD	OIRA 12866	11/17/2008	
		RESPA Mortgage Rule - FINAL nvestmentAdviserPerformance - FINAI	SEC	Statutory Mandate	2/22/2012	73 Fed. Reg. 68,204-68,288
		ReportingInvestmentAdvisers - FINAL	SEC/CFTC	Statutory Mandate	11/16/2011	77 Fed. Reg. 10,358-10,368 76 Fed. Reg. 71,128-71,239
		eportinginvestmentAdvisers - FINAL NetWorthAccreditedInvestors - FINAL	SEC/CFTC	Statutory Mandate	12/19/2011	76 Fed. Reg. 81,793-81,806
		ElectronicPrescriptionsControlledSubstances - FINAL	DOJ	OIRA 12866	3/31/2010	75 Fed. Reg. 16,235 -16,319
		OnlinePharmacy - FINAL	DOJ	OIRA 12866	4/6/2009	74 Fed. Reg. 15,596 -15,625
		NonProfitCreditCounseling - FINAL	DOJ	OIRA 12866	3/14/2013	78 Fed. Reg. 16,138 -16,159
		CoalMineSafety - FINAL	DOL	OIRA 12866	12/31/2008	73 Fed. Reg. 80,656 -80,700
		BenefitsCoverageUniform - FINAL	DOL/Treasury/HHS	OIRA 12866	2/14/2012	77 Fed. Reg. 8,667 -8,706
		GeneticInfoHealthInsurance - FINAL	DOL/Treasury/HHS	OIRA 12866	10/7/2009	74 Fed. Reg. 51,664 -51,697
		HighVoltageMining - FINAL	DOL	OIRA 12866	4/6/2010	75 Fed. Reg. 17,529 -17,553
		ExaminationViolationCoalMine - FINAL	DOL	OIRA 12866	4/6/2012	77 Fed. Reg. 20,700 -20,716
		VehicleStandardsEjection - FINAL	DOT	OIRA 12866	1/19/2011	76 Fed. Reg. 3,211 -3,305
		EnhancingAirlinePassenger - FINAL	DOT	OIRA 12866	4/25/2011	76 Fed. Reg. 23,109 -23,167
59 DOT -	20100330 -	TireFuelEfficiency - FINAL	DOT	OIRA 12866	3/30/2010	75 Fed. Reg. 15,893 -15,947
		RoofCrushResistance - FINAL	DOT	OIRA 12866	5/12/2009	74 Fed. Reg. 22,348 -22,393
61 DOT -	20100706 -	DisabilitiesPassengerVessels - FINAL	DOT	OIRA 12866	7/6/2010	75 Fed. Reg. 38,877 -38,902
62 HHS -	20110617 - :	SunscreenOTC - FINAL	HHS	OIRA 12866	6/17/2011	76 Fed. Reg. 35,619 -35,665
63 HHS -	20130208 -	ChildrensHealthTransparency - FINAL	HHS	OIRA 12866	2/8/2013	78 Fed. Reg. 9,457 -9,528
64 HHS -	20101201 -	ACAMedicalLossRatio - FINAL	HHS	OIRA 12866	12/1/2010	75 Fed. Reg. 74,863 -74,934
65 HHS -	20120110 -	AdminSimplificationEFTs - FINAL	HHS	OIRA 12866	1/10/2012	77 Fed. Reg. 1,555 -1,590
		RateIncreaseDisclosure - FINAL	HHS	OIRA 12866	5/23/2011	76 Fed. Reg. 29,963 -29,988
66 HHS - :		EmergencyHomeLoan - FINAL	HUD	OIRA 12866	3/4/2011	76 Fed. Reg. 11,946 -11,956
			OCC	OIRA 12866	7/28/2010	75 Fed. Reg. 44.655 -44.708
67 HUD -					,,_0,_010	
67 HUD - 68 OCC -	20100728 -	RegMortgageLoanOrig - FINAL - NutritionStandards - FINAL		OIRA 12866	1/26/2012	77 Fed. Reg. 4 087 -4 167
67 HUD - 68 OCC - 69 USDA	20100728 - - 20120126	- NutritionStandards - FINAL	USDA	OIRA 12866	1/26/2012	77 Fed. Reg. 4,087 -4,167 74 Fed. Reg. 2 658 -2 707
67 HUD - 68 OCC - 69 USDA 70 USDA	20100728 - - 20120126 - 20090115			OIRA 12866 OIRA 12866 OIRA 12866	1/26/2012 1/15/2009 1/20/2011	77 Fed. Reg. 4,087 -4,167 74 Fed. Reg. 2,658 -2,707 76 Fed. Reg. 3,789 -3,813