Economic Studies at BROOKINGS

FEBRUARY 2026

ENGAGING ECONOMICS RESEARCHERS TO IMPROVE REGULATORY ANALYSIS

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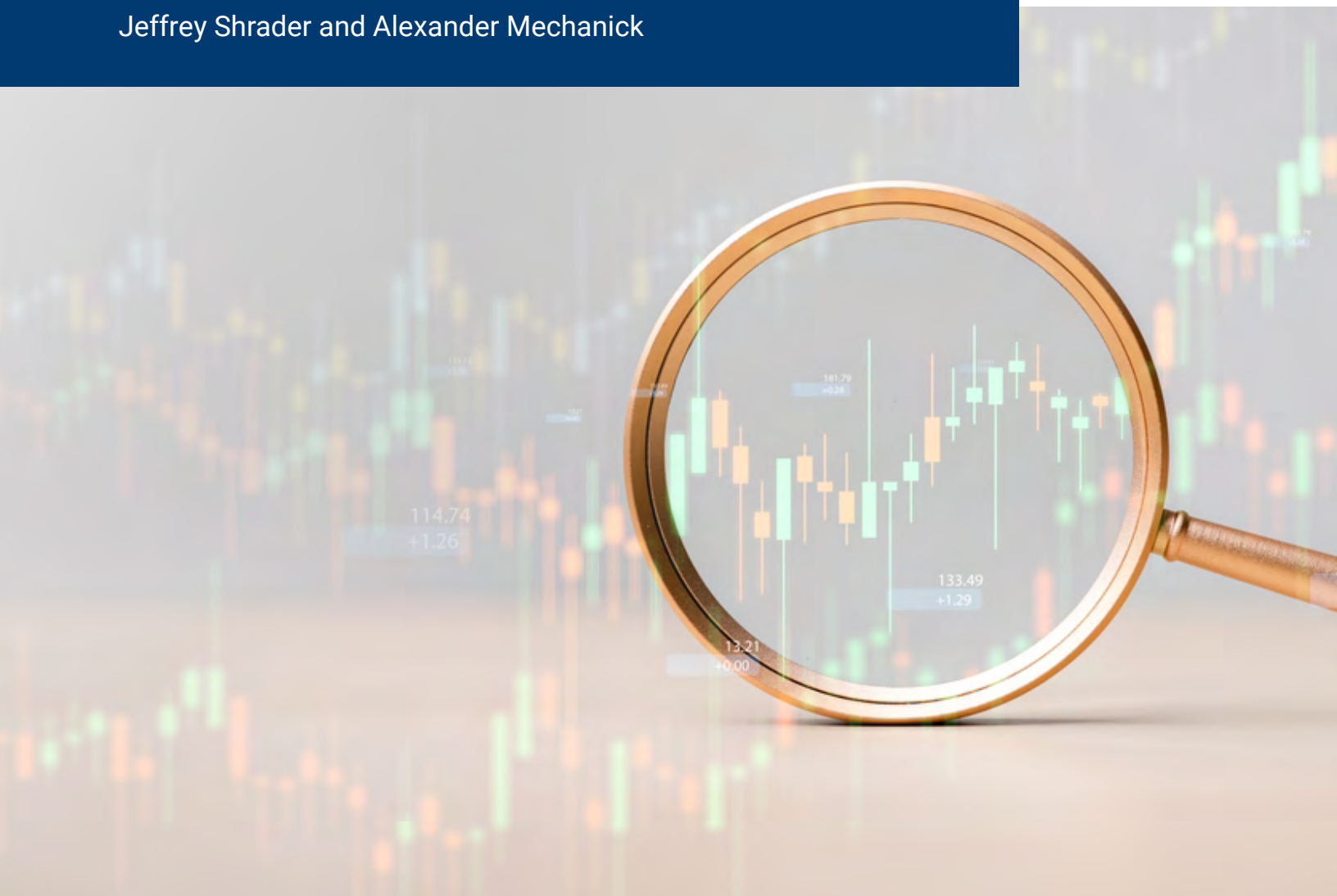

ABSTRACT

U.S. federal regulatory policy is, and should be, informed by economics research. Strengthening engagement between economists and agency analysts can help generate research questions to inform policy and enhance agencies' analytical capacities. We review challenges to improving such engagement and lay out an agenda for both researchers and agencies on better integrating economics research into the regulatory process. Researchers can take advantage of analytical "to-do lists" recently published by agencies to identify important unresolved questions and make use of a variety of existing ways to engage with agencies on those questions. We recommend that agencies continue to publicize research needs, find additional ways to break down barriers between researchers and analysts, and incentivize policy-informative research by highlighting when research is cited in agency analyses. Both groups can also work to keep each other informed about the frontier of economics research and its application to policy problems. Given the long-standing importance of economics research to the regulatory process, further improving engagement between these two groups can facilitate better policy decisions.

AUTHOR NOTES AND ACKNOWLEDGEMENTS

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DISCLOSURES

The Brookings Institution is committed to quality, independence, and impact. We are supported by a diverse array of funders. In line with our values and policies, each Brookings publication represents the sole views of its author(s).

1. Introduction

Researchers often wonder whether their work influences policy, hoping that it does. Yet, even for economics, one of the academic disciplines thought to most influence policy, researchers' influence—when it exists—is often indirect, diffuse, or obscure (Nelson 1987, Hirschman and Berman 2014). There are some areas, however, where the connection between economics research and public policy is exceptionally clear. A particularly important one is U.S. federal regulation. Economics research routinely plays an essential and direct role in regulatory policy analysis, and the evaluated regulations touch everything from health, the environment, labor, financial markets, and more. When promulgating regulations, federal agencies rely on research to such an extent that it behooves the economics profession to better understand the regulatory process and the role of economics within it. This article describes the regulatory process, the use of economic evidence in that process, and the challenges and opportunities for both academic researchers and policy analysts to improve this connection.

Economic analysis of regulation is durably embedded in the federal regulatory process. For nearly 45 years, most regulatory agencies have been required to conduct an economic analysis of their most significant regulations, often using benefit-cost analysis (BCA). Executive Order 12291, issued in 1981, originally mandated the use of BCA for a category of particularly important regulations. This mandate was maintained and modified by Executive Order 12866 in 1993, which also put in place the current framework for regulatory review. This framework includes a process whereby agencies' regulations (and supporting BCAs) are subject to an interagency review process, coordinated from within the Executive Office of the President by the Office of Management and Budget. Subsequent presidents have maintained the requirements contained in Executive Order 12866 and further upheld the use of some kind of economic analysis when evaluating regulations (for example, Executive Orders 13563, 13771, and 14094 in 2011 by President Obama, 2017 by President Trump, and 2023 by President Biden, respectively). These executive orders only have force as presidential directives, but they exist alongside legally-binding statutes that often call on agencies to connect their policy choices to the best available evidence and identify economic impacts of their regulations, including the Administrative Procedure Act of 1946 (APA), the Unfunded Mandates Reform Act of 1995 (UMRA), and the Regulatory Flexibility Act of 1980 (RFA). Despite increasing uncertainty around the future of federal regulatory policy, economic analysis appears to remain a central part of the regulatory process. As just one example of this continued importance, the Trump administration recently expanded the set of agencies whose regulations are subject to BCA requirements (Executive Order 14215). Deregulatory efforts may cause the emphasis of analyses to change to favor emphasis on cost savings or burden on industry; nevertheless, because reductions in staff, data, and budgets may make it more challenging for agencies to produce high-quality economic analysis, ready inputs from academic research may become even more important (Robinson 2025).

When following these executive orders and statutes, agencies routinely rely on economics research. Agencies might take a BCA directly from the published literature, nearly whole cloth. They might use estimates of specific parameters (for example, price elasticities) from the published literature when constructing their own analysis. Or they might construct their own estimates of specific parameters using methods or techniques from academic research. This widespread use of academic evidence and the structure of the regulatory review process provide opportunities for research to have policy impact and improve policymaking.

At the same time, there are challenges to the effective use of economics research in regulatory analysis. One of the most important challenges comes from changes to the fashionability of BCA as a research topic. BCA theory was an important area of academic research starting in the 1950s, with the core principles of the technique developed over the next three decades. Since that time, BCA has largely ceased to be a frontier topic in mainstream, general-interest econom-

ics journals, instead becoming a practical tool applied routinely by government agencies and international organizations (for a history, see Abelson 2022).

This change has led to gaps in how BCA is carried out by government agencies versus how academics approach welfare analysis—either with BCA or other tools. For example, some academic economists argue that "the quality of government analyses of regulation fall far short of basic standards of economic research" (Hahn and Tetlock 2008). Other researchers take issue with long-standing challenges to the relationship between BCA and broader notions of welfare, with Adler and Posner (1999) stating: "The reputation of [BCA] among American academics has never been as poor as it is today, while its popularity among agencies in the United States government has never been greater. Many law professors, economists, and philosophers believe that [BCA as practiced or as described in textbooks for practitioners] does not produce morally relevant information and should not be used in project evaluation." In recent years, alternatives to BCA such as the marginal value of public funds (MVPF) have gained popularity among academic economists (Hendren and Sprung-Keyser 2020).

The debate around the 2023 revisions to Circular A-4, a guidance document for federal economic analysis of regulation, illustrates that this division persists. Among other changes, the revised Circular allowed agencies to weight dollar-value benefits and costs by the marginal utility of income of the recipients of those effects. This is a standard practice when estimating welfare using modern economics models that feature representative agents with concave utility (i.e., declining marginal utility); it reflects that the value of what an additional dollar can buy a person diminishes as that person has more ability to purchase what they want. On one hand, large groups of mainstream, academic economists wrote in support of these revisions (for example, Autor et al. 2023; Gillingham 2023; Washington Center for Equitable Growth 2023). On the other hand, proponents of traditional BCA, though supportive of many of the changes, opposed this particular change (for example, Cordes 2023; Pizer 2023). This may reflect a difference in opinion between these groups as to whether BCA ought to be brought into alignment with, or remain distinct from, current approaches to public policy analysis common among academic economists.

Away from matters of theory, agencies often have to produce analyses of a regulation with data that cannot cleanly identify causality, whereas academic economists often focus on research questions that can be addressed using experimental or quasi-experimental data that can provide more confident causal identification. And the key questions that agencies focus on (for example, the exact value of relevant elasticities) are not viewed as prestigious areas of inquiry and accordingly often do not attract interest from top academic researchers or provide for placement in top academic journals. These mismatches between economics done inside and outside of government contributes to indifference or ignorance of the regulatory process on the part of academic economists and creates frictions or barriers to the incorporation of modern economic research.

Other barriers also exist to the effective use of economic evidence in policymaking. For one, when evaluating research, agencies are instructed to favor peer-reviewed publications—without regard for the varying degree of academic rigor applied to different publications—over preprints or working papers (OMB 2002). This causes problems, given the tendency for publication in economics journals to lag working paper results by years—far longer than other social science disciplines—and the accompanying shift towards the pre-publication circulation of working papers (Hadavand et al. 2024). This creates the potential for low-quality but nominally peer reviewed research to weigh equally heavily in regulatory analysis as higher-quality peer reviewed research and disproportionately heavily relative to high-quality working papers. There is an inherent challenge to having ready research on the effects of every possible action an agency might take, driving a wedge between existing evidence and the needs of the agency. Additionally, academic research emphasizes novel science while agencies are more reliant on consolidated, well-settled findings, creating mismatched incentives between the two groups.

However, we contend that some of these barriers can be overcome through actions taken by researchers and the government, leading to better integration of modern economics research into regulatory analysis and thus to higher-quality analyses. For example, academic economists do not need to turn back the clock on what is fashionable for publication. Rather, they can make simple changes to their research outputs—often the same changes that are called for by the open science and reproducibility movements such as increasing transparency and sharing data (Center for Open Science 2026)—that will make those outputs more readily usable by agencies. Researchers who wish to conduct research that is more likely to inform policy can identify recommended research topics early, using sources discussed later, providing more time to carry out or tailor research to agency needs.

Agencies can make more use of existing avenues for engaging with researchers through channels such as the Learning Agendas[1]—which call on agencies to produce strategic, multi-year plans to identify and seek answers to critical questions about their policies—and efforts like the Frontiers of Benefit Cost Analysis[2]—which brings agencies together to identify common challenges with monetization and quantification of the effects of their policies and to engage with the broader research community to find solutions to those challenges.

Better integration of economics research into regulatory analyses can help improve the quality of government decisionmaking. The exact effect of economics research on the quality of regulation is often debated (see, for example, Hahn and Tetlock, 2008). But empirical evidence shows that the quality of regulatory economic analyses can affect outcomes. For example, one study of federal regulations finds that rules with higher-quality analyses are more likely to withstand judicial review when challenged, suggesting that careful analysis can provide a defensible foundation for agency decisionmaking (Carrigan et al. 2025). Other research has demonstrated that agencies tend to cite more scientific evidence in analyses for rules that draw greater political or media attention, indicating that greater attention to rules leads agencies to strengthen their justification (Costa et al. 2016). Improved quantification and monetization of the effects of regulations (especially quantifying and monetizing previously unquantified and unmonetized effects) helps improve our understanding of the effects of policy (Masur and Posner 2016). And anecdotal evidence indicates that when government decisionmakers are considering alternative policies, regulatory analysis leads them to choose more beneficial options (Morgenstern 1997, Hahn and Tetlock 2008, McGartland 2021).[3]

These findings support the broader argument that the quality of regulatory analysis influences both the effectiveness and the legitimacy of policy. High-quality analysis clarifies tradeoffs, accurately portrays uncertainties, and forces explication of assumptions, which can help agencies design rules that achieve policy goals more efficiently and avoid unintended consequences. It also provides subject matter experts an opportunity to contest or support the analytic claims and—in a smaller number of salient cases—facilitates broader public debate about the justification of the policy decision, an important avenue for democratic feedback. Stronger engagement from economics researchers can help achieve these goals.

The rest of the article is organized as follows. The Background section reviews the regulatory process and the role of evidence in that process. The Challenges section lays out barriers to the effective incorporation of modern economics research into regulatory analysis. The Agenda section outlines proposals for how academic economists and federal agencies can work to overcome the challenges. The penultimate section discusses the current status of economic analysis of regulation, highlighting that—despite uncertainties—such analysis remains strongly embedded in government decisionmaking. The final section concludes.

2. Background: Evidence in regulatory analysis

2.1. THE REGULATORY PROCESS

Modern U.S. federal regulations are produced through a process that combines statutory mandates, political oversight, technical analysis, and input from both inside and outside the government. Figure 1 provides a schematic of how this process works for a typical agency notice-and-comment rulemaking, the process that most important regulatory actions follow.[4] Regulatory agencies such as the Environmental Protection Agency (EPA), the Department of Transportation (DOT), and the Department of Health and Human Services (HHS) are charged with implementing laws enacted by Congress. The creation of this authorizing legislation is one important place where economics research can inform policy, but it will not be our focus. Rather, we will focus on the process that begins once an agency decides to issue a regulation flowing from that authorizing legislation.

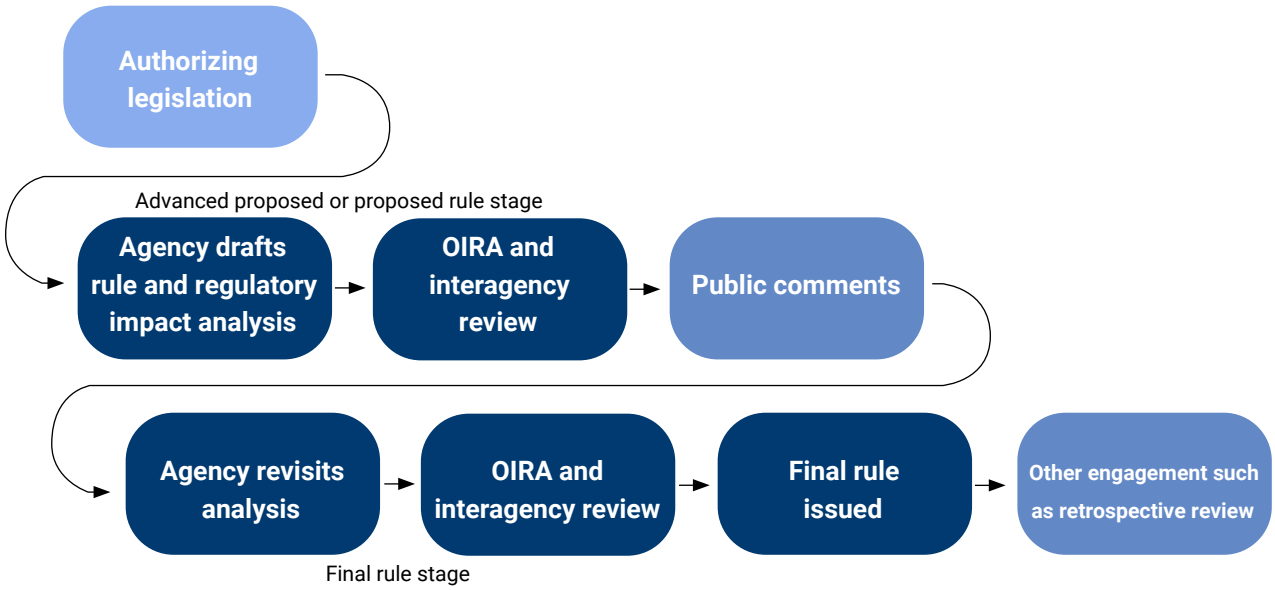
The modern regulatory process involves a series of internal and external analyses and reviews, following statutory requirements and a process laid out in Executive Order 12866. When promulgating a regulation, the executive order calls on agencies to "assess both the costs and the benefits of the intended 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," (Executive Order 12866). For important regulatory actions—those with an estimated economic effect of $100 million or more—an agency is required to prepare a regulatory impact analysis (RIA). The goal of an RIA is to assess the anticipated benefits and costs of several regulatory alternatives and monetize or otherwise quantify those effects if feasible. At the same time that an agency is developing the content of the proposed regulatory rule itself, it will also develop the RIA.

Once the agency has completed the proposed regulation and RIA, these are sent to the Office of Information and Regulatory Affairs (OIRA), housed within the Office of Management and Budget (OMB). OIRA's role is to coordinate an interagency review process and ensure that agencies have conducted analyses in line with established guidelines such as Circular A-4 (Sunstein 2019). Circular A-4 is particularly important because it provides guidance about analytic best practices for agencies, including how to determine the baseline(s) against which regulatory effects are measured, how to quantify and monetize benefits and costs where possible, and how to assess uncertainty through sensitivity analysis and alternative scenarios. These topics recur regularly across agencies' analyses, and how they are handled can influence how an analysis will rank the net benefits of different policies.

Circular A-4 was originally issued in 2003, substantially updated in 2023, and then the 2003 version was reinstated in 2025 (OMB 2003; OMB 2023; OMB 2025). A product of its time, the 2003 version of Circular A-4 currently in force contains little instruction on how to account for distributional concerns.[5] Furthermore, it says nothing about more recent developments in the economics literature such as behavioral economics or the use of declining discount rates.[6] The 2023 revision added or updated methodologies that agencies can use to capture the distributional effects of their regulations, behavioral biases, uncertainty, and discounting. The 2025 reinstatement of the 2003 version of Circular A-4 may indicate that the previously discussed opposition to aligning the practice of BCA with mainstream economics had purchase within the Trump administration. A less formal approach to distributional analysis than the one offered in the 2023 version, for example, may better align with opposition to policy that focuses on improving the welfare of low-income individuals. Similarly, the updated discount rates recommended in the 2023 revision were lower than those previously used. A lower discount rate will tend to favor policies that impose larger up-front costs to avert long-lived harms, a common feature of many environmental policies. Regardless, the 2003 guidelines, which largely advocate the use of "traditional" BCA, contribute to the wedge between how agencies carry out economic analysis of regulation and the research produced by modern, mainstream economists.

FIGURE 1

The Notice-and-Comment Rulemaking Process



OIRA review provides an institutionalized check: It creates incentives for agencies to rely on economic reasoning and evidence, provides an opportunity to increase consistency across agencies, and serves as a central point for political oversight of agency actions. The process has critics, but the OIRA review process is an important mechanism enhancing the role that economics and economic analysis play in regulatory policymaking (Revesz and Livermore 2017).

During the OIRA review process, OIRA's own staff reviews proposed regulations in parallel with review by other agencies and components of the executive branch. Given the wide range of different expertise across agencies, interagency review provides an important source of feedback for the originating agency. For example, if an EPA regulation might have implications for water quality on public lands, an analyst in the Department of the Interior may be able to provide helpful feedback on the rule and RIA. For an academic economist, the key point is that interagency review increases the chance that their work will become known to the originating agency because it broadens the set of possible government economists and analysts who will see and provide feedback on a regulatory analysis.

Following OIRA and interagency review, the process varies depending on the nature of the regulation. For notice-and-comment rulemakings (a particularly common and important category of regulations, as previously mentioned), the proposed rule is sent out for public comment, usually for a minimum of 30 days. This is the one part of the regulatory process where engagement from academic researchers is guaranteed to be possible, and some academics make use of the opportunity. The short timeline makes it essentially impossible to carry out novel research in time to affect policy at this stage, but a researcher's public comment can still be helpful, as described further in later sections. In brief, useful comments can either critique or support the agency's analysis. Importantly, comments should be specific and on topic to make it easier for agency analysts and economists to understand and incorporate the feedback. For example, a comment pointing out a section of the RIA that overlooked important research, and which provides those citations, could be easily incorporated and highly valuable. Public comments also form an important part of the evidentiary basis for any court cases that might later be brought against the agency related to the regulation.

After the public comment period closes, the agency addresses the comments, revising the rule and RIA if needed. The OIRA and interagency review process is then done a second time. After the process concludes, the agency can move to issue the regulation as a final rule, in which case the rule is published in the Federal Register. (The agency may also elect to propose a different rule after the public comment period closes, beginning the process anew, or may cease work on the rule without finalizing it.) Even after the rule is finalized, research from academics and interaction between academic researchers and agencies can evaluate the effects of the rule as implemented and compare those effects to what was projected by the agency in its regulatory analysis (a process often referred to as "retrospective review," see Harrington et al. 2000 and Fraas et al. 2023).

The quality of evidence used throughout this process is governed by a series of laws. For example, OIRA oversees compliance with Section 515 of the 2001 Treasury and General Government Appropriations Act (Pub. L. 106-554), better known as the Information Quality Act (IQA). The IQA is intended to ensure that regulations are based on the best available science and economics and uphold the "quality, objectivity, utility, and integrity of information … disseminated by federal agencies" by directing them to issue guidelines (following OMB guidelines) on the subject and to "establish administrative mechanisms allowing affected persons to seek and obtain correction of information maintained and disseminated by the agency that does not comply with the guidelines." The IQA also governs how agencies should engage in peer review of their own materials, like in-house research studies and guidance documents. The IQA provides an important incentive for agencies to utilize good evidence from academic sources, but it also leads to some perverse incentives, as discussed in the next section.

The Foundations for Evidence-Based Policymaking Act of 2018, known as the Evidence Act, also emphasizes the importance of data and evidence in federal decisionmaking. The Act is not specifically about regulatory analysis, but given that many of the agencies subject to the act have regulatory responsibilities, it does offer a path for understanding agency research needs related to regulatory analysis. The Act requires agencies to develop Learning Agendas and Annual Evaluation Plans, and it institutionalizes the role of chief evaluation officers and data governance structures. Although the Evidence Act applies broadly to program evaluation and policy design, it has important implications for regulatory analysis specifically. It encourages agencies to signal to the research community where gaps in knowledge exist. This broader evidence infrastructure connects directly to regulatory analysis, since RIAs often depend on data collected for other purposes such as surveys, administrative records, or academic studies. As the Evidence Act strengthens data accessibility and promotes an evaluation culture, it indirectly bolsters the analytic foundations of regulatory policymaking (Ciocca Eller 2024).

During the Biden administration, an interagency effort—the Frontiers of Benefit-Cost Analysis subcommittee, also referred to simply as "Frontiers"—was created, specifically devoted to improving regulatory analysis. Frontiers gathered representatives from more than 30 agencies to discuss common challenges to monetization and quantification of regulatory impacts and provided venues for engaging outside researchers to make progress on these challenges. For example, the Frontiers subcommittee released two reports detailing areas where regulatory agencies needed more research input (Patel et al. 2023; Figinski et al. 2024), and the subcommittee hosted a series of workshops that brought together agency analysts and outside researchers to discuss research on targeted areas. Frontiers provides a model for one way to communicate research needs from the government to outside researchers and improve agency and researcher dialogue.

In addition to the opportunities for engagement provided by the regulatory process and the legal requirements on the quality of evidence, researchers have a variety of other opportunities to understand upcoming agency actions and engage with agencies. Agency plans for upcoming regulatory actions are posted publicly to the Unified Agenda of Regulatory and Deregulatory Actions.[7] Agencies will often post information about policies well in advance of the issuance of a proposed rule, providing more time for researchers to

engage. Researchers can also serve on a variety of advisory panels either within the agency or with groups like the National Academies of Sciences. Researchers can be peer reviewers for agency guidance or research (both when it is originally produced by the agency and if the research is eventually submitted for academic journal publication). And researchers are sometimes invited to the White House or to the agency to present on their work.

The Frontiers effort is not dissimilar to work that the Congressional Budget Office (CBO) has recently embarked on to help improve its budgetary cost estimates of proposed legislation. The process of developing budgetary cost estimates (often nicknamed "budget scoring") focuses on the federal fiscal effects of legislation, rather than welfare analysis. But because budget scoring effectively amounts to a subset of the work needed to produce a BCA, similar modeling inputs are often needed; researchers may find that work relevant to regulatory policy is also relevant to budget scoring. CBO has solicited calls for research that would significantly improve the quality of its budgetary cost estimates in an article published in the Journal of Economic Perspectives (Staff of the Congressional Budget Office 2024). Much of the research that CBO requested (analyzing changes to pension insurance, spending on climate change adaptation, and funding childcare, as well as improved distributional analysis) overlap with research needs highlighted in the Frontiers reports. This is unsurprising, as legislative and executive officials share many policymaking priorities. CBO appears to have found this practice useful: It continues to solicit such research on an ongoing basis, using blog posts that request new research in areas that would substantially improve important areas of its work (for a recent example, see Duchovny 2025).

2.2. PREVIOUS LITERATURE ON HOW RESEARCHERS CAN PRODUCTIVELY INFLUENCE POLICY

Given the widespread desire among researchers to produce work that will inform policy and the need that policy analysts have for research inputs, many previous commentaries and articles have discussed the role of science in policymaking and the ways researchers can better engage with policy. The challenges and recommendations in this article also mirror some of the observations contained in the 2023 and 2024 Frontiers reports. We recommend that readers interested in the perspective of government analysts and policymakers on these issues consult those reports, particularly the 2024 report, which contains recommendations for how researchers can engage more productively in the policy process.

Most directly related to this article, Ahmed et al. (2023) discuss how researchers can connect their work to the federal regulatory process. They discuss the role of public comments as an institutionalized way for researchers to engage with policy, tips for writing effective comments, and the importance of using available resources like the Federal Register to track agency proposals and opportunities to comment. Below, we discuss how one can use the Unified Agenda and other resources to also gain a longer-term view of upcoming agency actions.

Oliver and Cairney (2019) review the—often anecdotal or informal—literature on how researchers can influence policy. They provide a set of general "dos and don'ts" for researchers that overlap with the recommendations later in this article. Their first recommendation mirrors our own: Do high quality research. Following best practices in research and endeavoring to produce good work will yield dividends both in terms of trust in, and usefulness of, the work for policymakers.

Coming from the perspective of CBO scoring, Elmendorf (2022) recommends that researchers translate their findings to be non-technical and more easily digestible. He also cautions researchers that legislative impact can be a slow process requiring patience. The connection between research and regulatory policy is both more direct and systematized, making it a ripe area for economists to deepen their engagement.

3. Challenges to better use of economic evidence

Federal regulatory policy relies heavily on academic research, but there are challenges to further improvements in both the use of research and the ability for researchers and agency analysts to share research needs and findings.

3.1. DIFFERENCES IN LANGUAGE, FOCUS, AND PHILOSOPHY

Because of the emphasis on economic analysis of regulation and the use of BCA when analyzing regulatory policy proposals, economics is often thought of as the lingua franca of regulatory agencies. Indeed, the widespread use of economic analysis inside regulatory agencies means that most agencies have one or more in-house economists and analysts familiar with economic reasoning. Despite sharing much common ground, however, there still exist challenges in communicating between government regulatory agencies and academic economists.

As discussed in the background section, regulatory analyses typically follow traditional BCA principles when analyzing regulations. Traditional BCA focuses on certain notions of allocative efficiency while ignoring distributional effects of policy. Allocative efficiency is also a common area of focus among academic economists, but common analyses in modern economics follow the tradition of welfare economics and recognizes the role of decreasing marginal utility.

Academics might also lack familiarity with quirks and conventions in regulatory analysis. For example, largely out of convention and because they are treated as offsetting transfers, agency BCAs sometimes do not analyze the full fiscal effects of regulation, such as the effects of a regulation on future tax revenues. Tools for policy analysis, such as the MVPF, that are increasingly used by academic economists, incorporate the full fiscal impacts of policies due to their focus on value per net dollar of expenditure (Hendren and Sprung-Keyser 2020), leading to a mismatch between agency and academic practices.

Agency analyses also differ from academic studies in the types of endpoints that each focuses on. The most common regulatory impact quantified and monetized by agencies is mortality risk (Colmer 2020). In research from the field of public economics, it is common to focus on endpoints such as later life earnings (see examples in Hendren and Sprung-Keyser 2020). Agencies typically avoid using earnings changes as a way to estimate willingness to pay for a regulation, again due to convention as well as some theoretical motivations.

The mismatch in endpoints can lead to very different understandings of the effect of a given policy among regulators versus academics. Public benefit programs provide a stark example. Policies such as the Supplemental Nutrition Assistance Program (SNAP) or housing vouchers from the Department of Housing and Urban Development provide in-kind goods to program recipients. Typical agency analyses of modifications to these types of programs will consider such programs to be a pure transfer. In other words, the agency will analyze the program as if it simply moves $1 from one person's pocket into another person's, creating no net effect on welfare. Regulatory analyses of such policies, therefore, are largely driven by changes in administrative burden or costs of program participation and administration. These costs are often a tiny fraction of the overall spending on public benefit programs which, in aggregate, distribute more than $1 trillion per year.

Setting aside potential distributional or equity motivations for such programs, this analysis differs from modern academic analyses in two ways which could cause the agency to under- or over-value the programs' effects. First, the analysis potentially overstates welfare gains by ignoring the in-kind nature of these programs. In a frictionless, neoclassical economics model, in-kind goods are weakly less valuable than cash. For an individual in such a model the in-kind good is only as valuable as cash in the case where it is exactly the good the person would have used the cash to buy. Second, agency analysis potentially understates the value of these programs because it ignores

reasons why these goods might be more valuable than an ordinary cash transfer. For example, a household facing credit constraints might have a high willingness to pay but a low ability to pay for food aid or housing vouchers. Modern economics approaches to evaluating these types of programs seek to estimate the willingness to pay of individuals and use such estimates to inform the value of the policy (Finkelstein and Hendren 2020).[8]

3.2. BARRIERS TO ENGAGEMENT

In addition to the cultural differences discussed above, multiple other barriers prevent engagement between academic economists and government analysts. Government regulatory analyses are often conducted under tight deadlines. Time-constrained and risk-averse agencies might be reluctant to engage academic help early in a regulatory process when outcomes are uncertain and staff resources are tight. And though agency analysts might be subject matter experts on many topics, the number of topics covered by agency actions is vast, meaning that it is unlikely that any set of analysts will be expert on all topics the agency encounters. Thus, the analysts might not be familiar with relevant research or researchers.[9]

On the academic side, researchers have their own time constraints and interests which prevent them from devoting substantial effort to understanding regulatory contexts or translating research into a format more easily used in regulatory analysis. Academics generally are incentivized (through tenure processes, compensation, etc.) to focus exclusively on research output and—depending on the institution—teaching responsibilities, with little weight given to actions undertaken for their impact on public policy. Academic researchers might also have trouble identifying who in an agency is the right contact for engagement.

Ciocca Eller (2024) characterizes this two-sided challenge as a coordination problem between agency analysts and academics. As it stands, agencies often rely on in-house expertise, even if imperfect, or may routinely interact with a small set of known and trusted outside academics. In some cases, these routine interactions take place through formal advisory committees which are subject to the requirements of the Federal Advisory Committee Act (FACA). In other cases, they may engage through professional academic societies, conferences, or the like. For an academic who is not in "the circle," finding a way to productively engage in the regulatory process can be daunting.

Routine and systematized methods for engagement (such as the public comment process) typically come too late in the regulatory process for academics to shape the overall direction of policy in substantial ways, though public comments do offer an important avenue for some types of engagement, as discussed further in the next section. Federal government analysts are aware of the barriers to engagement and have made efforts to overcome them through channels in addition to public comments, for instance through the Evidence Act Learning Agendas and the Frontiers of Benefit-Cost Analysis initiative.

Legal barriers can exacerbate this issue. For example, the previously-mentioned FACA imposes a number of burdensome requirements on advisory committees (the submission of a charter prior to forming, mandatory re-chartering every two years, limits on communication among members outside of official meetings, at least 15 days of advance public notice before any meeting, a mandate that meetings must—with exceptions—be open to the public, etc.), which may deter agencies from setting up new advisory committees subject to the Act even where it would allow them to benefit from additional expertise.[10] As another example, the Paperwork Reduction Act requires agencies to go through a laborious process—involving not just one, but two public comment processes—before collecting certain kinds of information from more than nine people (Mechanick 2025). The delays and costs associated with complying with this process likely deters agencies from seeking out expert input from academic voices outside of the more formal and regimented FACA process.[11]

3.3. THE DOUBLE-EDGED SWORD OF INFORMATION QUALITY REQUIREMENTS

A significant limitation in aligning academic research with regulatory analysis arises from how "information quality" is operationalized in practice. The IQA requires that OMB create guidance on what constitutes high quality evidence for agency decisionmaking. This guidance can help agencies avoid low-quality studies, but it also creates perverse or exploitable incentives. For example, the guidance states that peer-reviewed publications are presumed to be objective unless proven otherwise (OMB 2002).[12] This guidance means that agencies will readily rely on evidence published in a peer-reviewed journal but will not rely on a high-quality working paper. In the economics discipline, where working papers are standard and journal delays can take years, important and up-to-date research findings may never fully clear the peer-review hurdle by the time a regulation is in its analytic phase.

This reliance on peer review can be exploited by actors seeking to sway regulatory debates. Because peer review is itself an uneven standard—varying across journals, editorial boards, and disciplines—low-quality or biased studies can still make it into "peer-reviewed" venues and then be given outsized weight in rulemaking. One historical illustration is the tobacco industry's long use of ostensibly peer-reviewed research to influence regulation. For example, nearly all peer-reviewed papers on tobacco or nicotine in the journal Regulatory Toxicology & Pharmacology between 2013 and 2015 were authored by individuals with industry ties, and a substantial majority drew conclusions favorable to industry interests (Velicer et al. 2018). The industry also established grant programs—such as the Philip Morris External Research Program—to fund peer-review-eligible research that could later be cited in regulatory or legal contexts as though it carried the same legitimacy as independent scholarship (Bero 2005). In practice, this dynamic risks skewing agency attention toward superficially credentialed but weak studies while sidelining higher-quality but unpublished work or cutting-edge methods.

3.4. THE CURSE(S) OF DIMENSIONALITY AND ACADEMIC INCENTIVES

One persistent challenge is the mismatch between the topics that dominate the published economics literature and the questions agencies actually need answered. Academic research tends to focus on problems that allow for clean econometric identification, offer a broad theoretical contribution, and generally break new ground. Agencies often require narrower, well-supported evidence. Academics and agencies thus exist on different sides of the "disruption" (breaking new ground through research) versus "consolidation" (making policy on the basis of consensus in the research) divide that creates incentive alignment problems more broadly in science (Park et al. 2023).

A clear example is non-fatal health effects. Mortality impacts are extensively studied because they are stark outcomes that lend themselves to relatively straightforward statistical analysis. Mortality data is also readily available to researchers from well-maintained government databases for many countries around the world. Because of the importance of fatal health effects and the large number of studies examining them, agency analyses routinely quantify and monetize the effects of regulation on mortality (Colmer 2020). Non-fatal effects such as asthma attacks, hospital visits, or lost workdays are conjectured to also be of importance for understanding regulatory benefits, but there are so many different non-fatal effects to study—and academic publisher appetite for yet another study on another dimension of health is so low—that this conjecture remains largely unproven.[13] The imbalance leaves agencies with limited evidence to monetize or even quantify these outcomes, despite their potential importance for real-world policy decisions.

Another obstacle arises from a mismatch of what agencies and academics want in their analyses. Agencies frequently seek estimates of how incremental changes to an existing policy would affect outcomes, whereas the academic literature is more likely to examine the introduction of a policy in the first place.

This divergence reflects methodological incentives: Large, extensive-margin policy shifts create cleaner research designs and attract scholarly attention, while intensive-margin changes are harder to identify and often produce less novel findings (coming, by construction, after studies examining the introduction of a new policy). For instance, while there is substantial literature on the effects of introducing public benefit programs for children, there is far less evidence on how specific adjustments—such as altering benefit levels or eligibility thresholds—shape outcomes (Figinski et al. 2024). For agencies, however, these incremental questions are often the most relevant.

Compounding the problem is the sheer diversity of possible regulatory options. For any given policy, there are numerous potential tweaks, and it is unlikely that a researcher will have studied precisely the modification under consideration. Moreover, even when data or analyses exist, smaller policy adjustments can be difficult to evaluate with sufficient statistical power. These issues create a structural gap: Agencies need fine-grained, policy-specific evidence, while academic research more often produces broad, program-level findings. The result is that when agencies turn to the literature to inform benefit-cost analysis, they frequently find that the available evidence does not line up neatly with the questions at hand.

4. Agenda for analytical improvements

The challenges discussed above also suggest some solutions. Here we discuss actions that can be taken by researchers outside of the government, agency analysts inside the federal government, and other actors including legislators to improve analytical capabilities and the use of economic evidence.

4.1. RECOMMENDATIONS FOR RESEARCHERS

Echoing Oliver and Cairney (2019), the most important recommendation we have for researchers is to do good, high-quality, and objective research. Research is important for the policy process precisely because it provides factual inputs that form the essential basis for rational decision making (Sunstein 2019). High-quality research helps communicate central findings as well as scientific uncertainty and the strengths and weaknesses in a given finding. Beyond this, we have a number of more specific—and perhaps more useful—recommendations.

4.1.1. FOLLOW RESEARCH BEST PRACTICES TO MAKE RESULTS MORE USEFUL FOR AGENCIES, INCLUDING BY MAKING REPLICATION CODE AND DATA AVAILABLE

Making replication resources available to agencies can also help agencies incorporate research findings into their own analyses. An emphasis on open science and reproducibility is a growing trend in the academic research world. These modern best practices—including publication of code and data, posting of full survey or experimental instruments, and a greater emphasis on replication—can improve the relevance and utility of research in the policy context. Given the wide array of different inputs policy analysts might need, as described in the previous section, it is inevitable that analysts will encounter situations where they would like to make use of a particular input that does not exist in published research. This situation can be ameliorated by earlier engagement between researchers and analysts, as discussed below, but open science and reproducibility efforts can also help. A policy analyst could use replication code and data, for instance, to conduct their own analyses that better match their needs.

An illustrative example occurred while one of us was serving as a government advisor. We were reviewing a proposed regulation on worker protections and knew of academic research relevant to the general area covered by the rule. Because of the specific way the regulatory analysis needed to be conducted, we needed to know the effect of a worker protection policy conditional on worker occupation. An existing study provided estimates of the effect of a similar policy, but these estimates were not conditional on occupation. Re-analyzing the study's data conditional on occupation would have been a straightforward

exercise (setting aside endogeneity concerns), but at the time, the data and code used for the research were not publicly available.[14] This mismatch meant that the agency could not directly rely on the study to inform its analysis, a missed opportunity that could have been avoided by public replication code and data.

4.1.2. MAKE USE OF AGENCY RESOURCES WHEN DEVELOPING YOUR RESEARCH AGENDA

Economists interested in engaging with regulatory policy can benefit from tracking the government's own signals about its analytical "to-do list." The Frontiers of Benefit-Cost Analysis reports, agency Learning Agendas and Annual Evaluation Plans developed under the Evidence Act, and the Unified Agenda of Regulatory and Deregulatory Actions all identify areas where agencies see the need for new methods or research. Taken together, these resources provide a roadmap of analytic priorities. For academics, they highlight where research is most likely to be policy-relevant and where agencies are actively seeking input. For agencies, they serve as a way to communicate both near-term and longer-term evidence needs to the research community. By monitoring these longer-term signals, economists can better align their work with the policy process, increasing the odds that new research will be used in regulatory analysis and ultimately shape real-world decisions.

Economists can also use these resources to identify more "evergreen" areas for analytical improvement. For example, the Frontiers reports identified eight broad areas where multiple agencies are looking for analytical improvements: (1) non-fatal health effects, (2) the effect of ecosystem services, (3) wildfire and extreme weather effects, (4) the value of information and transparency, (5) the effects of public benefit programs, (6) better analysis of distributional effects, (7) better analysis of risk, (8) and improved multi-market analysis (Patel et al. 2023; Figinski et al. 2024). The reports describe specific research questions within each of these focal areas that researchers are encouraged to work on in order to improve agency analyses. Progress on these areas will likely be policy-relevant for multiple federal agencies for many years.

4.1.3. DRAFT AND SUBMIT EFFECTIVE PUBLIC COMMENTS

Public comments on proposed rules provide a limited but still important and routinely available avenue for academics to have a real influence on regulatory outcomes. Our recommendations to researchers for effective public comments are summarized in Figure 2. OMB instructions on how to submit public comments, as well as their recommendations for effective comment writing can be found online[15] (see also Ahmed et al. 2022).

Writing public comments takes time and is likely a task with low career returns for an academic, so our recommendations emphasize the importance of keeping comments brief, targeted to narrow and specific changes the researcher would like to see, and focused on providing evidence to agencies. Even so, if we want to see more public comment writing from researchers, such activities should be better incentivized.

First, be explicit about whether a comment is directed at the RIA. Agencies often rely on contractors to triage large volumes of comments (Dooling and Potter 2024), and if it is clear that an observation pertains to the RIA, the contractor is more likely to flag it for the agency economist.

Second, to maximize impact and minimize researcher effort, comments should offer tangible, implementable, and brief suggestions. Instead of general criticism, point to specific lines or assumptions. For example, if an RIA excludes an important citation, point to the specific page of the RIA where that citation should go and provide the full citation to the agency. Because staff may only have a few minutes to decide whether to incorporate a change, clarity and concision matter. Academics should boil down their points to the essentials, while citing the relevant research to strengthen credibility. Getting to the point quickly will save both the agency analysts' and researcher's time.

Third, effective comments balance critique with support. By the time public comments are solicited, the "cake is already well baked," and sweeping changes are unlikely and may be legally unavailable unless the

FIGURE 2

How Academics Can Make the Most of Public Comments

Do:

- **Be seen:** State clearly if your comment addresses the Regulatory Impact Analysis (RIA).
- **Make it tangible:** Point to specific text that you want changed.
- Boil it down: Assume the reader has only five minutes; make your recommendation easy to implement.
- **Cite research:** Back up claims with relevant, high-quality studies.
- **Support good work:** Positive comments help agencies defend strong analysis against hostile critics. Critiques are valuable, but support is particularly valuable because it is rare.
- **Use guidance:** Frame suggestions with reference to Circular A-4 or other applicable rules.
- **Know your audience(s):** Write for the agency, but remember your comment also becomes part of the record for potential court review.

Don't:

- Submit only general criticisms without actionable alternatives.
- Assume sweeping changes can or will be made this late in the regulatory process.
- Overlook the value of brief, clear, and well-sourced comments.

agency re-proposes its rule (another reason to keep comments narrow and specifically targeted). But agencies can use positive feedback to defend contested parts of their analysis against hostile comments, so it is valuable to highlight what the agency has done well in addition to noting weaknesses.

Fourth, although it involves extra work on the part of the researcher, citing OMB's Circular A-4 or other guidance can help situate the comment in the framework agency staff must follow, increasing the likelihood it is taken seriously. In general, the more a public comment "speaks the language" of the agency, the more easily the agency analyst can digest it. As always, knowing one's audience is key. And while the agency is the primary audience, it is not the only one. Public comments become part of the administrative record and may later be scrutinized in litigation. Academics who ground their critiques and endorsements in high-quality research can thus contribute not only to agency decisionmaking but also to the broader legitimacy and defensibility of regulation.

4.1.4. MAXIMIZE YOUR IMPACT BY GETTING TO KNOW YOUR AUDIENCE

The recommendations above largely focus on things researchers are already doing that they can double down on to increase the policy relevance and usefulness of their research. We focus on these recommendations because we know that incentive misalignment, time and resource limitations, and barriers to engagement are real constraints. To maximize policy relevance and informativeness, however, it is valuable to get to know the agency as an audience for research. Different agencies have different cultures and use different types of research in their analyses. For example, in part due to differences in authorizing legislation, some agencies prefer market-oriented approaches to regulation while some favor command and control. The EPA, when evaluating fatal health risks, has typically preferred to use the value of statistical life (VSL) while HHS has been more willing to use quality adjusted life years (QALYs). A researcher can come to understand these differences by looking at regulatory analyses produced by the agency or by engaging with agency analysts.

By knowing the audience, researchers can also more effectively summarize key research findings in a way that is especially useful to agency analysis. Such a summary can be done within a paper's conclusion or in a separate document. Reports, white papers, or publications in journals geared toward regulatory analysis such as the Journal of Benefit Cost Analysis can all help agency analysts find and digest relevant research.

4.1.5. CONSIDER TEMPORARY GOVERNMENT SERVICE

Many researchers report finding government service to be a professionally and personally rewarding experience. For example, some researchers employed by federally-funded research centers have been able to serve in federal agencies temporarily through the Intergovernmental Personnel Act. This can allow subject-matter experts to work within government on discrete projects temporarily before returning to their home institutions. Service in the federal government can give researchers a better understanding of the kinds of data and analysis that federal agencies could benefit from, and it could help researchers improve policymaking processes. Federal service can also offer opportunities to directly improve policy while serving in government. Those who have served can also help demystify tendencies within academic researchers for agency staff while they serve and demystify the policymaking process for the research community after they return to academia. Universities and academic administrators can help promote this service by considering it as part of tenure and promotion cases or by providing fellowships to help fund public service leaves.

4.2. RECOMMENDATIONS FOR AGENCIES

4.2.1. CONTINUE TO PUBLISH ANALYTICAL TO-DO LISTS

The Frontiers of Benefit-Cost Analysis initiative and the reports that came out of it offer a unique view into the research needs that agencies have, specifically those related to analytical improvements of regulatory economic analyses. A more permanent effort along these lines could create a virtuous cycle where academics know where they can find ideas for policy-relevant research questions and agencies know where to publicize research needs. Future presidents could set up similar efforts to Frontiers.

The Learning Agendas could also be used to raise analytical questions. On the plus side, the Learning Agendas are published regularly (at least every four years), so they can be used to raise new questions as they arise, and they are required by legislation, increasing the durability of the initiative. Learning Agendas are not specific to regulatory analysis, but agencies are free to use them to raise questions related to regulation. The primary advantage of a Frontiers-like effort—relative to Learning Agendas—is that it brings agencies together to highlight cross-agency issues and questions, potentially raising questions that are of more general interest to academic economists.

4.2.2. STAY UP TO DATE WITH ECONOMIC ANALYSIS

The OMB guidance currently governing agency economic analyses—the 2003 version of Circular A-4—omits developments in economics such as behavioral economics. It recommends outdated values for social discounting based on data from 1973 through 2003. And it does not discuss, and therefore does not encourage agencies to use, tools like general equilibrium analysis that can be important for accurately projecting the effects of policies (Acemoglu 2010; Fullerton and Heutel 2010). Given the importance of this guidance document to the practice of regulatory analysis, updating it could help bring agency analyses more in line with current economics research practices. In other words, updating guidance and promoting the use of more modern tools can help agencies meet the economics profession where it is.

Research papers that include welfare evaluations are also increasingly using alternative tools to BCA to do that evaluation. Tools like the MVPF have become especially popular in the field of public economics to evaluate spending and revenue-raising policies.[16] There are nuances to applying MVPF—developed to assess policies that involve government spending and taxation—to regulatory contexts that might not involve any direct change in government expenditure (Hahn et al. 2025), but agencies can often utilize the same inputs that go into MVPF calculations for their own regulatory analyses using a net benefits metric.

4.2.3. ENGAGE WITH THE ACADEMIC RESEARCH COMMUNITY

Agency economists and analysts can strengthen regulatory analysis by engaging more directly with the academic research community. Currently, many agencies' interactions with researchers are limited to reviewing public comments on proposed rules or occasionally commissioning outside studies. A more proactive approach can help agency analysts stay informed about findings in the literature, get to know relevant researchers, and engage with researchers earlier in both the research and regulatory process.

Attending academic conferences, participating in policy-relevant sessions, and keeping a regular presence at meetings of professional associations exposes agency staff to the latest methods, datasets, and empirical findings. Likewise, inviting researchers to give seminars or "brown bag" talks at agencies creates opportunities for dialogue and learning about research. Regular engagement also helps create relationships of trust, which can make it easier for agencies to ask targeted questions or commission follow-on research when needs arise.

Staying current with the flow of working papers and preliminary findings is especially important in economics, where high-quality research often appears years before journal publication. Monitoring new work through outlets like the National Bureau of Economic Research (NBER) working paper series or by viewing the NBER Summer Institute provides an efficient way to stay abreast of research developments. Ultimately, closer ties between agency economists and the research community ensure that regulatory analysis is informed not only by the existing literature but also by the frontier of economic knowledge.

4.2.4. INCENTIVIZE USEFUL RESEARCH

Our most straightforward recommendation is to use grant funding to incentivize research on topics that are relevant to improving policymaking. But while grant funding is indeed an important incentive, agencies also have other tools to encourage useful research. Letting academics know when their work influences policy can be a powerful incentive. As an illustration, the Council of Economic Advisors in recent years has sent notifications to researchers whose work is cited in the annual Economic Report of the President. Researchers have routinely mentioned to us that these notifications were impactful.

Beyond mere notification, making it so that references to research papers in regulatory analysis generate citations for researchers would help researchers make the case that their work is impactful, would help them identify which research papers are contributing to policy, and would directly incentivize researchers given the role of citations in some academic promotion decisions. Currently, agency analyses are not published in a way that generates citations. Recently, policy document citation databases have been developed, but these citations have yet to be incorporated into widely viewed citation counts from products like Google Scholar or Web of Science.

4.2.5. LEARNING FROM SUCCESS: THE ENVIRONMENTAL PROTECTION AGENCY

Among regulatory agencies, the EPA produces particularly sophisticated and high-quality analyses. Multiple lessons can be learned from the EPA about how to promote the use of economics research in regulatory policy. EPA staff work proactively to carry out many of the recommendations given above, including many actions to stay up to date on advances in economics and science. We will focus in particular on the National Center for Environmental Economics (NCEE), a component of the EPA's Office of Policy which provides substantial in-house expertise from well-trained Ph.D. economists, though the actions we point out are also taken by other components of the agency.

NCEE hosts a regular seminar series that brings in speakers, just like an academic department; NCEE economists regularly attend research conferences; and they hire new Ph.D.s regularly, causing them to engage with the economics job market and helping them stay informed about advances in the field. All of these actions substantially reduce the barrier to engagement between NCEE economists and the broader economics community. Because of their state-of-the-science knowledge, NCEE economists are able to act essentially like an in-house research institute and analytical consulting group which in turn helps EPA analyses be more objective, research-informed, and methodologically sophisticated.

5. Legal developments have not diminished the importance of economic researchers' engagement with policy

Recent Supreme Court decisions and actions, including expansion of the major questions doctrine (West Virginia v. EPA (2022))—requiring courts to not construe statutes as granting agencies power to address questions of sufficient economic or political importance, unless such a grant of authority is particularly clear—and the overturning of Chevron deference in Loper Bright Enterprises v. Raimondo (2024)—ending the practice under which courts would defer to a government agency's interpretation of a statute it administers, if that interpretation was reasonable—have generated substantial uncertainty about the scope of regulatory authority in the United States. But these changes will have far less of an effect on the economic analysis of regulation than other aspects of the regulatory process. Both Supreme Court decisions regard when agency actions are within the scope of statutory authority. For example, while overruling Chevron in Loper Bright, the Court stated that deference to agencies about the best interpretation of statutory authority "defies the command" of Section 706 of the APA, which requires courts to "decide all relevant questions of law." The Court argued that this "omission is telling, because Section 706 does mandate that judicial review of agency policymaking and factfinding be deferential." Thus, overruling Chevron does not affect the role of economic analysis given that such analysis contributes to policymaking and factfinding, rather than questions of law. Some scholars argue that the renewed emphasis on questions of law and statutory authority might cause agencies to change the mix of their staff to emphasize lawyers rather than economists (Coglianese and Walters 2024). If that occurs, such a reshuffling would only increase the importance of external economic input.

Ultimately, Loper Bright maintains—or even strengthens—the primacy of the APA in setting guardrails on how agencies should make regulatory decisions, and when courts should or should vacate those decisions. The APA generally requires that agencies base their actions in evidence and articulate a connection between the facts found and the choices made. Federal courts review agency decisions under the deferential—but by no means toothless—"arbitrary and capricious" standard (or sometimes, the equivalent "substantial evidence" standard) to ensure agencies have engaged in reasoned decisionmaking. Thus, continued reliance on the APA and this standard means a continued emphasis on high-quality evidence to support agency decisions.

The APA does not itself require economic analysis. And although other laws such as UMRA and the RFA contain some relatively broadly applicable provisions for agencies to analyze benefits and costs of their actions, much of the legal basis for economic analysis of regulation rests on executive orders. This creates the risk that current or future presidents could choose to do away with the emphasis on economics in agency policymaking with the stroke of a pen. Thus far, the Trump administration has not broadly taken such steps. There are areas where the Trump administration has foregone required economic analysis—for example, the Department of Energy proposed rescinding 16 energy efficiency standards without providing a BCA (Davenport and Cowley, 2025). But in other areas, the Trump administration has broadened regulatory review—for example, by calling for review of regulations from agencies that were previously exempted from OIRA oversight (Executive Order 14215). Deregulatory actions are also subject to the same APA standards as actions to make regulations more stringent, and agencies' failure to explain why they are diverging from prior analyses can be fatal in a legal challenge, so the Trump administration's decisions to forego analysis of certain deregulatory actions may result in unfavorable legal rulings. Similarly, policies that focus on government efficiency and burden reduction are still subject to economic evaluation in principle and the same, albeit deferential, judicial checks. Given this, the legal risks associated with a pullback in economic analysis of regulations may outweigh the benefits associated with speedier policymaking, reducing the likelihood of such a shift, or its durability, were it to occur.

6. Conclusion

Regulatory analysis is one of the rare and important venues where economics research has a direct impact on public policy. In few other domains are policymakers required to ground their decisions in formal economic reasoning and rigorous evidence. This creates a remarkable opportunity for the economics profession. While economists already play a role in shaping regulatory outcomes, more active and deliberate engagement could improve the quality, credibility, and effectiveness of future regulations.

The good news is that much of what economists can do to support better regulatory analysis overlaps with what scholars already seek to do. Producing high-quality research, clarifying tradeoffs, improving methods, and identifying the distributional consequences of policies all directly advance both academic inquiry and policymaking. The federal government has also created avenues to make that engagement easier. The Frontiers of Benefit-Cost Analysis reports provide an agenda for analytical improvement, signaling where new methods and evidence are most needed. Agency Learning Agendas and Annual Evaluation Plans identify research priorities and knowledge gaps. And the public comment process, while imperfect, provides a direct channel for academics to weigh in on specific rules and analyses. Agencies can build on these structures to further engage with relevant academics.

At the same time, there are significant challenges ahead. Recent Supreme Court decisions have created legal uncertainty about what regulatory authority agencies have, and the precise role of benefit-cost analysis in judicial review could be unsettled in the years to come. Yet rather than diminishing the importance of regulatory analysis, so far these changes have made high-quality research inputs even more important.

For now, agencies still need to demonstrate, through careful and transparent analysis, that their rules are grounded in evidence and sound reasoning. Rigorous economics can help agencies "show their work," making regulations both more defensible in court and more credible in the public sphere.

This moment therefore calls for a renewed commitment from the economics profession. Economists should seize the opportunity to shape the future of regulation, ensuring that regulatory analysis reflects modern economics. When economists bring strong evidence and clear arguments into the regulatory process, the positive effect can be substantial. In practice, agency economists are often receptive to arguments that are well-grounded in economic reasoning and empirical evidence, even if they do not always prevail. For agencies, the most persuasive economics is often that which couples strong policy conclusions with strong legal arguments. Agencies care deeply about avoiding losses in court, because a regulation that is vacated after a legal challenge does little good. Accordingly, a useful way for economists to frame their contributions is to show how better analysis can reduce litigation risk. When good economics solves a legal problem as well as an analytical one, it becomes doubly valuable.

Ultimately, the quality of regulatory analysis matters because it informs the policy choices that affect the health, safety, and economic well-being of millions of people. The economics profession has both the tools and the opportunity to improve regulatory analysis. But seizing this opportunity requires economists to step more fully into the regulatory policy space, to translate academic insights into usable evidence, and to engage constructively with the institutions of government.

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Endnotes

1 Available here: https://www.evaluation.gov/evidence-plans/learning-agenda/.

2 Available here: https://bidenwhitehouse.archives.gov/omb/information-regulatory-affairs/frontiers-of-benefit-cost-analysis/.

3 Hahn and Tetlock (2008) relate the story of the phaseout of leaded gasoline. "Upon entering office in 1981, the Reagan administration had targeted that regulation for elimination. According to Christopher DeMuth, who was the OMB official in charge of reviewing the regulation: 'A very fine piece of analysis persuaded everyone that the health harms of leaded gasoline were far greater than we had thought, and we ended up adopting a much tighter program than the one we had inherited. At the same time, the introduction of marketable lead permits saved many hundreds of millions of dollars from the cost of that regulation.'" Similarly, Morgenstern (1997) asked economic analysts in the EPA to describe their experience with BCA and all respondents agreed that economic analysis improved the quality of the rule being considered. DellaVigna et al. (2024) provide more systematic evidence, albeit in the local government context, by analyzing the adoption of nudge policies following randomized control trials (RCTs). They find that only a small share of cities adopts the policies and that the strength of evidence coming out of the RCT does not predict adoption. Rather, adoption is higher if the nudge is incorporated into a pre-existing city policy rather than part of a new policy. In the federal context, as previously discussed, analysis is primarily integrated into pre-existing policy processes (for example, in rulemaking). Although the connection to Federal regulatory policy is indirect, these findings reinforce the value of working within existing processes to make evidence adoption easier for policymakers, as discussed in Section 2.2.

4 The APA specifies that agencies must publish proposed and final rules to the Federal Register and provide an opportunity for the public to comment on those rules. There are exceptions for rules involving "a military or foreign affairs function of the United States," "relating to agency management or personnel or to public property, loans, grants, benefits, or contracts," that take the form of "interpretative rules, general statements of policy, or rules of agency organization, procedure, or practice," or for which public comment would be "impracticable, unnecessary, or contrary to the public interest." The courts have held that this last exception "is to be narrowly construed and only reluctantly countenanced." Mack Trucks, Inc. v. EPA, 682 F.3d 87, 93 (D.C. Cir. 2012).

5 In addition, Robinson et al. (2016) shows that agencies following the 2003 version of Circular A-4 have rarely, if ever, included meaningful distributional analyses.

6 For a review of the motivations for using a declining discount rate in regulatory analysis, see Arrow et al. (2014). Declining discount rates can be especially useful when evaluating long-lived policies or policies that have long-lasting effects. Theoretically, a declining discount rate schedule is efficient if shocks to the consumption discount rate are uncertain and positively correlated (Gollier 2012).

7 You can find the Unified Agenda here: https://www.reginfo.gov/public/do/eAgendaMain

8 Differences in valuation could also be addressed by using a higher welfare weight for lower income individuals or using an ex-post valuation method that lets people pay for the policy in the future when they have more money.

9 Supporting this idea, research finds that citation of research in policy documents is driven more by mentions in the news media than by academic citations (Dorta-González et al. 2024).

10 Some existing FACA committees are also currently being eliminated including for the Department of Homeland Security, Department of Health and Human Services, Department of Agriculture, and other agencies (Executive Order 14217).

11 Voluntary solicitations of input from the entire public that take the form of a "request for information" or "advanced notice of proposed rulemaking" are exempt from this process, which make them both appealing

to agencies and important opportunities for researchers to engage.

12 Paragraph V.3.b.i of the guidelines states: "If data and analytic results have been subjected to formal, independent, external peer review, the information may generally be presumed to be of acceptable objectivity."

13 The EPA's 2011 Mercury Air Toxics Standards analysis provides a stark example. The goal of the regulation was to reduce the amount of mercury from powerplant emissions, and the EPA regulatory analysis describes a wide variety of possible non-fatal health benefits including avoided developmental delays, improved cardiovascular health, and improved memory. But the EPA was only able to monetize the effects of mercury in utero from a mother's consumption of freshwater fish, at a total benefit of $5 million versus monetized costs of $9.6 billion (EPA 2011, Masur and Posner 2016).

14 In this particular case the data were restricted and could not be made available, an issue we understand raises challenges for this recommendation.

15 https://www.regulations.gov/assets/files/Public-Comment-on-Federal-Regulations_Final.pdf.

16 See the Policy Impacts Library for a database of papers using the technique: https://policyimpacts.org/policy-impacts-library/.

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