12 Embedding TCA Within US Regulatory Decision-Making

Kathleen A. Merrigan

True Cost Accounting (TCA) is not a brand-new concept or approach but rather an evolved, modern, and hopefully improved variant of Cost Benefit Analysis (CBA). For this reason, it is important to study CBA, understand how it has been used historically, and glean lessons learned for TCA designers, advocates, and practitioners.

CBA is deeply embedded in US policymaking at the federal level. The goal of CBA is to facilitate rational decision-making by adding up and comparing the negative and positive consequences of an action to determine whether the action will lead to a gain or a loss. CBA has been particularly applicable to appraising the desirability of proposed policy. Given the similarity between TCA and CBA, it is useful to study how CBA has been used in US federal rulemaking. This chapter provides a brief overview of that history and extracts relevant lessons learned from CBA application, with particular attention to CBA shortcomings. The purpose in doing so is twofold. First, it is important to alert TCA designers of potential methodological and implementation challenges that have hindered CBA, with the hope that such knowledge will facilitate creative TCA design to circumvent such challenges. Second, it is common for new US presidents to review rulemaking processes and issue directives for improved rulemaking aligned with their philosophical leanings. It is possible that TCA could be substituted for CBA during any forthcoming administration changeover; thus, an understanding of relevant US regulatory processes and laws could provide insight into how to elevate TCA as the best choice analytical tool for those newly in charge of the executive branch.

TCA, A Variant of CBA

The Politics of TCA Versus CBA

There is more similarity between TCA and CBA than there is difference. Both are methodologies intended to fully describe and make transparent the costs and benefits associated with proposed actions and, in doing so, help decision-makers understand the implications of contemplated actions. To the extent that there are differences, they mainly relate to the scope of analysis. The degree to which TCA extends beyond the typical scope of CBA is significant, as the goal is to encompass

and evaluate a wide range of externalities, both positive and negative, including in-depth attention to aspects related to social and human capital. While there is nothing inherent in CBA that narrows the analysis from the ambitious scope of TCA, in practice it has not covered the breadth of issues evaluated in TCA.

From the beginning of CBA, there have been strenuous objections to placing a value—particularly a monetary value—on certain things based on ethical and/or moral grounds. For example, putting a price tag on a life or a limb (although insurance does this) or monetizing the intrinsic value of a forest. Martha Nussbaum writes that while CBA is helpful in answering obvious questions, it does not help with confronting tragic questions—those in which addressing the question surfaces unpalatable choices and, perhaps, obscures the presence of moral dilemmas (Nussbaum, 2000). It would be tragic to use CBA to choose between a proposal that allows children to spray pesticides and one that allows children to drive tractors, when both are too dangerous for children to undertake; in each case, costs are not disadvantageous, but flat out wrong. Although objections to monetizing nonmarket benefits, like happiness, have largely come from liberal critics, the irony could be that finding successful ways to monetize social and human capital could be what ultimately justifies stronger regulations (Sunstein, 2018). It has yet to be determined how TCA methodology will address social and human capital externalities, as these methodological issues are now being refined.

Much of the foundational work behind TCA has been generated and funded by left-leaning people and organizations, some of which have given up hope that CBA can deliver the full transparency across the four capitals that is foundational to TCA philosophy and, eventually, practice. Does that make TCA a liberal thing? Is CBA a conservative thing? As will be discussed, Democrats and Republicans alike seem to be generally supportive of CBA in the USA, although both parties are also looking to improve upon current practice. Revesz and Livermore issue a challenge: “It is time for progressive groups, as well as ordinary citizens, to retake the high ground by embracing and reforming CBA” (Revesz and Livermore, 2018). Perhaps taking the high ground means touting TCA as the cure for historic CBA failures. If so, it is critical to understand how CBA has worked, and not worked, over time, so that TCA can be shaped and promoted as a desirable alternative.

The History of CBA

Philosophical Roots

CBA has long been viewed as important to rational decision-making (Katzen, 2006). The basic idea that no action can be taken unless the benefits justify the costs has deep philosophical roots, with threads of its origin seen in the writings of Alexander Hamilton, Adam Smith, Jeremy Bentham, John Stuart Mill, Friedrich Hayek, Walter Lippmann, and Amartya Sen, among others (Sunstein, 2019). It has been a cornerstone of welfare economics, even with the inherent difficulties of defining and measuring welfare (Zerbe et al., 2010). And it has been a mainstay of US federal policymaking, particularly since the Reagan era (1981–89),

when it was enshrined as a tool for producing objective analysis to aid regulatory decision-making (Bipartisan Policy Center, 2020). While it is interesting to understand the philosophical roots of CBA, in practice, it is untethered to a particular philosophical camp. Rather, it is a widely used technocratic tool that aids decision-making, no matter the direction a particular decision might take.

International Organization, Journal, Recognition

Although this chapter is focused on use of CBA by the US federal government, the science and practice of CBA extends well beyond US borders. For example, in 2014 the European Commission published a how-to-guide to CBA to appraise investment projects (European Commission, 2014). The Society for Benefit-Cost Analysis, established in 2007, had members from 35 countries. The Society launched the open-source *Journal of Benefit-Cost Analysis*, published by Cambridge University Press, and which is international in scope; a 2019 special issue volume was titled, “Benefit Cost Analysis in Low- and Medium-Income Countries: Methods and Case Studies” (2019). The point here being that CBA has been recognized as a valid tool to advance rational decision-making across the globe; this conceivably opens a space for TCA to expand the scope of the decision-making process.

CBA in US Federal Policymaking

At this writing, CBA must be undertaken for most major and significant US proposed rules, including those likely to result in an annual impact on the economy of \$100 million or more, rules considered to be novel, and rules that materially alter entitlements. The CBA is available for review by government officials and the public, and ideally it identifies all costs and benefits of a proposed rule with attendant dollar values and is intended to inform decision-makers and the public of the potential impacts of proposals and thereby empower them to provide substantive feedback.

The historical roots of CBA are found in the Administrative Procedures Act of 1946, which established notice and comment rulemaking and required agencies to provide explanations for their actions. Beginning with the Reagan Administration, a series of executive orders (E.O.s) have been issued that relate to rulemaking and CBA (Note that an E.O. is not statutory law, but it does bind executive agencies and require their adherence until such time as it is repealed by a later president). In 1981, President Reagan issued E.O. 12291, which stated that regulatory action should not be undertaken unless the potential benefits to society outweighed the potential costs. The E.O. mandated CBAs for major rules and established the Office of Information and Regulatory Analysis within the Office of Management and Budget (OMB) at the White House which oversees all federal rulemaking to this day. In 1993 President Clinton issued E.O. 12866, affirming the earlier Reagan E.O. and the role of CBA. President Obama issued three E.O.s on rulemaking, with the most significant being E.O. 13563, which, among other things, recognized

inherent difficulties in CBA, stating that “each agency may consider (and discuss qualitatively) values that are difficult or impossible to quantify, including equity, human dignity, fairness, and distributive impact” (E.O. 13563). The E. O. also required retrospective analysis of existing rules (E.O. 13563). President Trump issued two E.O.s related to CBA, E.O. 13771 that established new ways to cut costs of regulations and E.O. 13777, which required all agencies to appoint a regulatory reform officer and a regulatory reform task force to identify regulations ripe for repeal, replacement, or modification (E.O. 13777).

Box 12.1 US Regulatory Instruments Referenced in this Chapter

<i>Year</i>	<i>Instrument</i>	<i>Title</i>
1946	Statute	Administrative Procedures Act
1981	Reagan E.O. 12291	Federal Regulation
1993	Clinton E.O. 12866	Regulatory Planning & Review
1997	Appropriations Directive	Section 645 of PL 104–208 (Treasury Approps. Act)
2001	Statute	Regulatory Right to Know
2011	Obama E.O. 13514	Leadership in Environmental, Energy, & Economic Performance
2011	Obama E.O. 13563	Improving Regulation & Regulatory Review
2012	Obama E.O. 13610	Identifying & Reducing Regulatory Burdens
2017	Trump E.O. 13771	Reducing Reg. & Controlling Regulatory Costs
2017	Trump E.O. 13777	Enforcing the Regulatory Reform Agenda

Lessons Learned from CBA for TCA Consideration

Many of the CBA flaws that have been identified over time are unlikely to be solved by simply substituting a TCA approach. Scholars over the decades have documented and debated CBA shortcomings, and advocates of TCA would be well advised to absorb the lessons learned and, to the extent possible, design TCA methodologies in recognition of the four greatest CBA challenges: lack of sufficient knowledge; complexity of analysis; implementation realities; and regulatory budgeting.

Knowledge Gaps

A CBA is only as good as the data used to produce it, and the kinds of hard data needed to produce a successful analysis are sometimes unavailable or unreliable. One important aspect of this is that regulated entities are often the primary source for data on potential costs of policy proposals. Going directly to the source is a good instinct in many ways, and requesting data from regulated entities is sometimes the only way to get necessary information, but it does have the potential to produce compromised data. Regulated entities have an incentive to exaggerate the costs of proposed regulations in order to avoid or

soften them (Katzen, 2006). Moreover, it might be difficult to separate out the costs of specific actions. For example, a company might implement worker protections on its own, absent regulation, and in contemplating the costs of proposed worker protection regulations, it might be difficult to accurately calculate the differential between what the company intended to do on its own and the what the proposed regulation would cost (Congressional Research Service, 2014; United States Government Accountability Office, 1995).

The articulation of certain benefits, particularly in dollar values, is challenging. A 2014 US Government Accountability Study of 203 federal rules emphasized that agency officials found monetizing benefits more difficult than monetizing costs (Government Accountability Office, 2014). In particular, monetizing welfare benefits, such as quality of life, freedom, relationships, and happiness is difficult for many reasons, and because these values are not traded in the marketplace, analysts struggle to give them a price tag within a CBA. But absent a benefit attribution, these values become invisible. Among the examples cited in CBA literature of non-traded benefits that often go unmeasured is biodiversity (Congressional Research Service, 2014), which of course was the concern that led to the launch of TEEBAgriFood, the TCA effort initiated by the United Nations (UN) Environment Programme in 2015. Techniques such as “willingness to pay” and “statistical life” calculations are used to approximate hard to measure benefits, but few are satisfied by the state of the art. There is almost universal agreement that measurement of welfare benefits and other nontraded goods is a longstanding and significant weakness of CBA.

Absent full information in the face of risk, some argue that “The Precautionary Principle” should prevail. The Precautionary Principle holds that when conclusive evidence is not available related to an action, especially actions that could have irreversible consequences, the government should not proceed—or proceed with extreme caution—until extensive scientific knowledge is obtained. This principle has been applied particularly in issues surrounding the environment, and is the bedrock of many international agreements (e.g., the Rio Declaration, Kyoto Protocol). CBA and TCA could push up against the precautionary principle, as neither methodology can promise complete information necessary to understand risks.

Overwhelming Complexity

Some federal rules are hundreds of pages long, without counting the hundreds of additional pages in accompanying analyses, including the CBA. Consider the proposed rule introduced in 2020 on continuous improvement in the National Organic Program, which covers a range of activities such as labeling of non-retail containers, training of inspectors, supply chain traceability, and grower group certifications, with each of these issues and others contained in the proposal requiring consideration of the relevant costs (approximately \$7.4 million) and benefits (approximately \$87 million) (Agriculture Marketing Service, 2020). The complexity of CBAs that accompany significant rules is often

overwhelming, and, in many cases, that complexity renders the documents useless. Many CBAs are left unread by busy policymakers and inaccessible to average citizens. For these reasons, some CBA scholars have urged greater simplicity in CBAs, brought about by the construction of system boundaries, aggregation techniques, and, perhaps most importantly, elimination of the expectation that the CBA must be definitive and complete (Zerbe et al., 2010). Reducing the complexity might provide greater clarity and allow citizens to reflect on CBA findings in their comments submitted for consideration in the rulemaking process (Sunstein, 2018).

Implementation

The quality and success of CBA, as implemented by the US federal government, has been compromised in three major ways. First, as we have learned through the TCA efforts described in this volume, in depth analysis of externalities takes time and resources. Yet Congress does not appropriate a separate budget to conduct CBA associated with rulemaking. Rather, each individual agency must carve out funding from existing program budgets to conduct the CBA. In other words, money spent outsourcing a CBA contract and/or internal staff time devoted to CBA are resources no longer available for programmatic priorities (e.g., CBA costs subtracted from cost-share incentives for soil enhancing practices in the case of rulemaking undertaken by the United States Department of Agriculture [USDA] Natural Resources Conservation Service). This leads to agency staff wanting to “cut corners” (Katzen, 2006) and conduct CBA “on the cheap” in order to protect programmatic budgets.

Second, producing a quality CBA requires skill and experience. Not all agencies have economists or otherwise qualified analysts on staff capable of executing a CBA, and even for those that do, the staff available to undertake CBA work do so infrequently. Other than at the OMB, government lacks a trained and dedicated CBA workforce. As a result, the quality of CBA work is uneven and, in the worst cases, inconsistent.

Third, and most significantly, it has become standard practice for program staff to first draft a proposed rule and then pass it on to their colleagues who subsequently develop a corresponding CBA. This linear progression of work reduces the CBA to a paper exercise that is designed to justify the proposal rather than shape it (Katzen, 2006). Rather, CBA should be undertaken in parallel with development of the proposal, so that the analysis can inform the rulemaking docket in progress and allow policymakers to make informed adjustments along the way.

Pitfalls of Regulatory Budgeting

Politicians are always promising to reduce regulations and historically this has been attempted through “regulatory budgeting.” In 1997 a directive was inserted into an appropriations bill that required OMB to estimate the aggregate costs and benefits of federal regulations as a way to keep track of what was

going on and reign in the regulatory state; this provision became permanent law in 2001 (Congressional Research Service, 2014). Execution proved difficult, however, and eventually OMB concluded that coming up with aggregate estimates for all federal rules on an annual basis was infeasible and, instead, began providing Congress with a ten-year rolling summary of costs and benefits for major rules only. It was with great fanfare, then, when the Trump Administration announced E.O. 13771 in 2017, directing agencies to cut costs of regulations by 1) repealing two existing regulations for every new regulation issued; and 2) capping the total incremental costs imposed by all new regulations in a given year to zero. In 2018 the Trump Administration announced that its regulatory reforms eliminated \$50.9 billion in overall regulatory costs across the federal government in just one year, and it placed more onerous regulatory budget caps on certain agencies (e.g., Environmental Protection Agency) that required costs of regulatory actions to be less than zero. The aggregation of CBAs—or TCAs if TCA becomes the methodology of choice—facilitates politicians’ temptation to put the federal government on a regulatory “diet” and limit the total volume of rules and overall compliance costs imposed on the economy.

Opportunities to Substitute TCA for CBA in US Policymaking

Retrospective Review

Given the elaborate work that goes into public notice and comment rulemaking, it is not surprising that, over time, studies have been conducted to evaluate the accuracy of CBAs *ex post*. How well did the CBA identify and predict costs and benefits? Generally, these studies have revealed significant errors but no systematic bias (Sunstein, 2018). While too few in number, such studies have led to great interest among CBA scholars in retrospective review—formalized, systemic empirical research of *ex post* costs and benefits (Katzen, 2006). The dedicated regulatory person and task force required for every agency, as established by E.O. 1377, could take on the responsibility of retrospective review and even go so far as making it a public process with an opportunity for the public to comment.

The emerging interest in, and enthusiasm for, retrospective review can be deployed in support of TCA. To help policymakers to consider the potential value of substituting TCA for CBA, it might be useful to select several CBAs over the past several years and, in a retrospective way, apply TCA in those contexts to determine whether, and how, TCA methodology might have delivered different results. For example, would a TCA have resulted in different information and valuation of 2019 USDA rulemaking related to line speeds for poultry plant workers, perhaps because TCA might ascribe higher value to workers’ well-being than a traditional CBA? If so, might TCA have changed the course of rulemaking at the time, and if so, would the meat processing industry have fared better during the 2020 coronavirus disease (COVID-19)

pandemic, where many workers became ill and some died owing to working conditions? While that is speculation on top of speculation, the example is given to suggest the potential of TCA retrospective review.

The TCA Revolution

Cass Sunstein, the former Director of the Office of Information and Regulatory Analysis during President Obama's first term and well-known CBA scholar, says that he would not be surprised to see Congress enact CBA into law in the coming years. In his 2018 book, *The Cost-Benefit Revolution*, he writes: "Democrats and Republicans alike embrace CBA and many of them support legislation that requires it" (Sunstein, 2018, pp. 4). Sunstein recommends that Congress enact existing executive orders related to CBA (see chart) into law to provide affected people the opportunity to go to court to require that regulations be issued when benefits unambiguously justify the costs (Sunstein, 2018). Furthermore, he recommends establishment of an Office of Regulatory Accountability separate from the White House and empowered to investigate inaction, as well as actions of federal agencies; in 2019 five Republican Senators introduced the "Independent Agency Regulatory Analysis Act" to do just that, although it was not enacted into law.

Sunstein is right—there is great interest in CBA, and there are demands from Republicans and Democrats to improve upon its current administration. For example, in 2018 the Environmental Protection Agency (EPA) published a list of questions in the Federal Register in which it sought comment on how to achieve consistent and transparent interpretations of costs and benefits in rule-making (Environmental Protection Agency, 2018); in 2020 the agency published a proposed rule related to the use of CBA in Clean Air Act rulemaking that builds on what was learned through the public response to those 2018 questions as well as in multiple public hearings on CBA (Environmental Protection Agency, 2020). The "CFTC [Commodity Futures Trading Commission] Cost-Benefit Analysis Improvement Act" was introduced in 2020 by a Republican member to strengthen CBA in commodity futures trading. In the same Congress, a Democratic member introduced the "Smart Building Acceleration Act" to require CBA for federal investments in smart buildings. In 2020 the Bipartisan Policy Center, a think tank in Washington, DC known to host conversations and produce reports on cutting edge issues, held an event on the evolution of CBA (Bipartisan Policy Center, 2020). Clearly, interest in the design and value of CBA is evident across the policymaking space at the federal level.

History has shown that new Administrations seek to put a mark on executive branch regulatory proceedings. The Trump Administration's roll-back of regulations and the E.O.s enacted by the administration, particularly the requirement that before any new regulation is issued, two existing regulations must be removed, are difficult to implement and are viewed by many Democrats as an attack on the regulatory state. A new Administration is likely to introduce new

E.O.s to guide rulemaking and this would provide an opportune time to introduce the concept and practice of TCA into those new E.O.s.

The time is right to advance TCA, as the “revolution” that Sunstein and others are calling for in the practice of CBA. Between interest in the US Congress, calls from scholars and think tanks, and an eventual change of leadership in the executive branch, there is substantial appetite to improve upon current CBA practice. TCA should be held up as the solution that US policy-makers seek.

Conclusion

TCA is not the radical departure from CBA portrayed by some TCA advocates. If TCA designers ignore the lessons of CBA shortcomings, there is no reason to believe that TCA will overcome the difficulties that have plagued CBA practice. It is the intention of this chapter to alert those interested in advancing TCA of the potential challenges ahead and to encourage creative design to address and counter CBA shortcoming briefly described herein. A final thought—if the degree of difference between TCA and CBA is greatly exaggerated, it will be very difficult politically to substitute TCA for CBA in upcoming US federal reforms of regulatory processes. Rather than promoting TCA as something brand new, the best course of action, for adoption in US rulemaking, is to harness the power of familiarity and argue that TCA is simply an improved form of CBA. Indeed, it is.

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