Legislative Impact Accounting: Incorporating Prospective and Retrospective Review into a Regulatory Budget

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Congressional decision-making suffers from scarce information about the scope and economic consequences of legislative actions. This paper proposes a better method to overcome congressional information scarcity. Our proposal relies on the premise that regulations have similar economic effects as taxes and spending, and therefore should be scored and tracked as part of the budget process. Our proposed system of legislative impact accounting (LIA) builds on the concept of a regulatory budget by developing a system for both prospective and retrospective review to create an effective feedback loop to better communicate information about economic effects of regulations to Congress.

INTRODUCTION

Information scarcity leads to poor choices, and government actions are not immune to this constraint. Yet there is no systematic way for Congress to comprehensively track and assess the direct or indirect economic impact of legislative actions—including the regulatory progeny of legislation.[1] This paper proposes a better method to overcome congressional information scarcity by providing Congress with more and better information about legislative and regulatory actions. Our proposal relies on the premise that government actions—in particular, regulations—have

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1. We use the term "economic impact" to describe the complete set of social costs and benefits. In contrast, fiscal cost includes only monetary outlays.

similar economic effects as taxes and spending, and therefore should be scored and tracked as part of the budget process. Our new proposal, legislative impact accounting (LIA), builds on the popular idea of a regulatory budget. Closing the regulatory loop by providing Congress with actionable information through prospective and retrospective reviews will improve and connect both the regulatory and budget processes.

APPLICATIONS FOR PRACTICE

- Congressional decision-making suffers from scarce information about the scope and economic consequences of legislative actions including the regulatory progeny of legislation.
- Government actions—in particular, regulations—have similar economic effects as taxes and spending, and therefore should be scored and tracked as part of the regular budget process.
- Our proposed system of legislative impact accounting (LIA) builds on the concept of a regulatory budget by developing a system for both prospective and retrospective review to create an effective feedback loop to better communicate information about economic effects of regulations to Congress.

While federal regulations are carried out by executive or independent regulatory agencies, regulations originate from acts of Congress. Congress is charged with overseeing how well regulations hew to congressional intent. However, Congress's ability to actively enforce its oversight capacity over agencies is imperfect, as famously argued in McCubbins, Noll, and Weingast: "Assuring bureaucratic compliance with the preferences of political overseers is an especially rich example of the principal-agent problem" (1987, 273). In the case of oversight, Congress recognized the impossibility of perfectly monitoring agencies, so it created administrative procedures in order to limit agency mission drift or noncompliance and to force agencies to create and deliver better information regarding the actual political consequences of agency actions.[2]

Current administrative procedures are no longer enough to provide Congress with actionable information to curtail unwanted regulatory outcomes of its legislative delegation. Legislation and regulation both inevitably yield unintended consequences which increase as a function of the size, scope, complexity, and design of the public law. Recent acts of Congress have grown in length and complexity (Li et al. 2014; Von Laer 2015). Figure 1 shows a scatter plot of the average length of acts passed by the 97th to 113th Congress, and a trend line (Von Laer 2015).[3] As a result of the increasing length and complexity of enabling laws, it is increasingly difficult to anticipate the actual number, consequence, and scope of regulations that these laws generate. Despite the existence of administrative procedures, the actual outcomes of an act's regulatory progeny may turn out dramatically different from the act's intended purpose.[4]

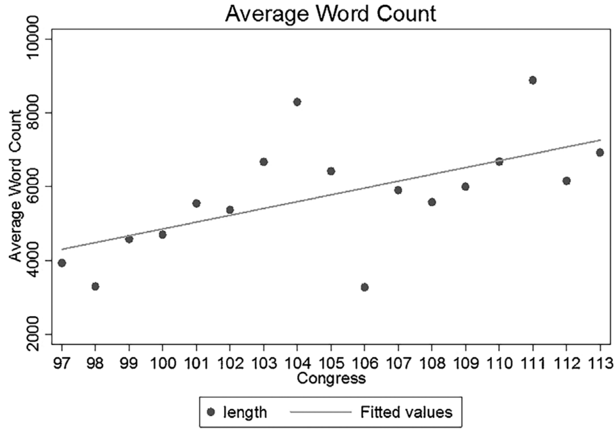
The current legislative and regulatory processes do not adequately inform Congress about the costs of its regulatory mandates. Those involved in regulatory oversight have long advocated for

2. While this is the central point of McCubbins et al. (1987), the Administrative Procedure Act arguably encompassed other goals, such as ensuring that stakeholders had a "voice" in the development of regulations.

3. The trend line depicts the fitted values from a bivariate ordinary least squares regression. The 113th Congress was still ongoing when these data were compiled. The data thus run through most but not all of the 113th Congress.

4. There is a large body of legal literature exploring the legal processes available to address questions of delegation of authority, legislative intent, and potential mission drift (Merrill and Hickman 2001; Kagan 2001). Separate from these issues, we raise the matters of economic intent and economic consequences.

FIGURE 1
Growth in Length of Acts of Congress.



a "regulatory budget" (Litan and Nordhaus 1983; Thompson 1997).[5] Like taxation and direct government expenditure, regulations are a mechanism for transferring wealth and have similar economic effects as taxes and spending. Assessing a tax on carbon has many of the same impacts on energy prices as requiring the installation of a new environmental protection technology at power plants—however, the tax would appear in government budgets and the regulatory requirement is not systematically accounted for. In its most simple form, a regulatory budget treats regulatory costs as equivalent to government spending and accounts for each annually in the budget process.[6]

Regulatory budgets are one tool legislatures could use to help agencies better inform their regulatory agendas. However, regulatory budget proposals to this point have not included any systematic way for Congress to assess the intent of their authorizing legislation and its regulatory progeny. Our proposal of legislative impact accounting (LIA) explicitly adds prospective and retrospective reviews into the regulatory budget process, giving Congress new information and the incentive to use it.

The implementation of any form of regulatory budgeting could, of course, face a variety of obstacles, depending on their design and their administrative requirements. For example, Meyers (1998) identified three issues that could arise when implementing a regulatory budget. The first issue is the difficulty of selecting an initial macrobudgetary constraint—an issue that our

5. Robert Crandall first mentioned "shadow budgets" as a form of tabulating regulatory costs to the private sector in 1978.

6. A first-order analysis of a minimum wage is an interesting example of how the language of costs, spending and taxation are not necessarily straight forward. In strict terms a minimum wage is a tax on employers and spending on workers. However, this categorization is not helpful for a regulatory budget. Under a regulatory budget, the tax (i.e., greater wage expenditure) on the employers is the "cost" that would be budgeted, and any increase in wages can be considered the "benefit."

proposal can overcome by using counts of regulatory restrictions (which are freely available from the RegData Project) or some derivative thereof.[7] Second, as with many reforms to regulatory or legislative procedures, regulatory budgeting would comport administrative costs. Our proposal arguably minimizes those costs, however, by building on existing institutions in federal regulatory and legislative procedures.[8] Finally, Meyers (1998) notes a common concern that only budgeting costs (i.e., not allowing them to be offset by benefits) can skew the analysis. While we maintain that focusing on costs is important to the effectiveness of a budget constraint, our proposal also includes a role for benefit estimates to help Congress and agency staff prioritize those regulations with the greatest effects.

Legislative impact accounting incorporates economic analyses of legislation and regulation into the budget process in the following ways. First, all agencies receive congressional appropriations for the total yearly costs of their regulatory portfolios. Second, all new legislation is accompanied by prospective economic analyses of the economic costs of proposed legislation (which we call "legislative impact assessments"). The analysis is produced and presented to Congress prior to voting. Third, ex-ante regulatory impact analyses and ex-post retrospective analyses produce estimates of the costs of agency actions related to specific acts of Congress. These estimates are passed back to congressional budget scorers, who update the prospective legislative impact assessments produced in the first step. Finally, this feedback is used to update agency budgets in the following budget cycle or amend the authorizing legislation to mitigate unforeseen costs. Legislative impact accounting will give Congress more complete and accurate information about the full economic effects of both congressional and agency actions. The proposal explicitly budgets regulatory costs, but also provides information about regulatory benefits for Congress to better assess tradeoffs in budgeting.

The remainder of this paper proceeds as follows. The next section gives background on regulations, followed by a background on budgeting. We then examine standard proposals for regulatory budgets and how legislative impact accounting can further strengthen past proposals. Finally, we briefly discuss other countries' informative experiences, the implementation of legislative impact accounting and conclude.

BACKGROUND ON REGULATION

The number of pages published in the *Code of Federal Regulations* has more than tripled since 1970, going from 54,834 pages in 1970 to 185,053 pages in 2016 (Office of the Federal Register 2016). Similarly, the number of regulatory restrictions—words that create binding legal obligations—has grown from 834,659 in 1997 to 1,071,231 as of November 2016 (McLaughlin

7. Data from the RegData Project on regulatory restrictions contained in federal regulatory code and several states' regulatory codes are available at http://regdata.org.

8. Meyers's concern that regulatory budgets could increase congressional micromanagement is also addressed throughout the paper. Our view is that increased congressional oversight should be viewed as a feature of legislative impact accounting, rather than a deficiency.

and Sherouse 2017). The growth of regulatory restrictions over time mirrors the growth of the regulatory state—a phenomenon perhaps partly attributable to an increasing willingness of Congress to delegate authority to agencies or an executive branch that uses regulations as an alternative path for policymaking.[9] Each new regulation carries several types of costs, and the accumulation of these costs can create additional, unique economic costs. The nature of regulatory accumulation and legislative delegation creates a fundamental asymmetry in regulatory actions where a larger than optimal (from an economic efficiency perspective) stock of regulation is much more likely than the optimal stock.

The first and most obvious of regulatory costs are direct costs to the government, the impacts of which can be measured by changes in outlays or revenues. For example, the direct costs to the government of implementing and enforcing the Affordable Care Act are the costs of direct subsidies to consumers, tax credits and the cost of operationalizing the law's infrastructure, such as online exchanges.

Second, direct compliance costs are imposed upon regulated entities. Direct compliance costs arising from federal regulations alone likely total in the tens of billions of dollars annually (Office of Management and Budget 2012). Examples of direct compliance costs include the costs of designing, building, or upgrading machinery, equipment, and vehicles to meet design or performance standards, paperwork, or the cost of the labor that must be allocated to such activities.

Regulatory intervention in the market also leads to subtler trade-offs and consequences. In addition to direct compliance costs, regulation necessarily creates a third type of cost: opportunity cost, or the productive activity forgone because scarce resources are diverted from investment to compliance. For example, if company managers have to spend their time filling out paperwork that assures regulators a certain routine has been followed, those managers are unable to use that time to monitor employee actions or consider how to address new risks to the company or its workers (McLaughlin, Ellig and Yazji Shamoun 2014). Or, perhaps more importantly, funds that companies might have invested in the development of new technology, improved production, and management methods, or workplace risk reduction must instead be diverted to regulatory compliance.

The diversion of resources from optimal investment can be particularly troubling if it is devoted to compliance with activities that stem from obsolete or otherwise nonfunctional regulations. The phenomenon of continually adding new regulations to a growing stock of rules is termed regulatory accumulation. Whatever the merits of promulgating any individual rule, the accumulation of rules presents another unique set of problems, such as potential interactive effects, duplicative costs, diversion of scarce agency enforcement resources from functional rules to nonfunctional rules, and unnecessary complexity limiting competition and entry (McLaughlin and Williams 2014). Even if one assumes that each regulation leads to some positive outcome, the accumulation of regulations is not benign—the totality of regulations can create significant drag on economic growth.

9. In fact, while the rise of the regulatory state is not in dispute, there are several competing theories regarding why it has occurred (Glaeser and Shleifer 2003; DeMuth 2016).

Several studies have demonstrated that the accumulation of rules slows economic growth. One recent study found that between 1949 and 2005 the accumulation of federal regulations slowed US economic growth by an average of 2 percent per year (Dawson and Seater 2013). This cost is cumulative and exponential because economic growth is an exponential process that builds on the technological progress and growth of previous years. An average reduction of two percent over 57 years means that current GDP is about 40 trillion dollars smaller than it would have been had federal regulation remained at 1949 levels. In other words, current GDP possibly could have been triple its current size had regulatory accumulation been capped in 1949. Similarly, a more recent paper found that if regulation had been held constant at levels observed in 1980, the US economy would have been about 25 percent larger than it actually was as of 2012 (Coffey, McLaughlin, and Peretto 2016).

Additionally, a 2005 World Bank study found that a ten percentage point increase in a country's regulatory burden slows the annual growth rate of each citizen's personal income by half a percentage point (Loayza, Oviedo, and Servén 2005).[10] A separate study by World Bank economists found that improving a country's rank in terms of its regulatory environment (as measured by the World Bank's Doing Business index) from the 25 percent most burdensome to the 25 percent least burdensome can increase a country's average annual GDP growth by 2.3 percentage points (Djankov, McLiesh, and Ramalho 2006). There is still debate as to the magnitude of regulatory drag on economic growth, but recent research on the effects of regulatory accumulation on economic growth certainly indicates that the costs—in terms of growth forgone—are real and have been increasing over time.

The current regulatory review process is not well suited to account for the less obvious regulatory opportunity costs and regulatory accumulation. The Administrative Procedure Act was enacted in 1946 to establish a process by which regulatory agencies may propose and establish regulations. Among other purposes, the Administrative Procedure Act required some level of transparency from agencies, principally by establishing the familiar notice-and-comment process for rulemaking, wherein agencies publicly announce proposed rules and receive public input on the proposal.[11] McCubbins, Noll, and Weingast (1987, 273) argue that one of the key effects of the Administrative Procedure Act was to create politically actionable information for members of Congress—e.g., comments filed by interest groups or constituencies—after they delegated legislative power to agencies through intentionally vague statutes.

Newly proposed "economically significant" rules are also accompanied by regulatory impact analyses (RIA)—a universe that comprises a small fraction of new rules in a typical year. RIAs are formal cost-benefit analysis produced by the agency. This tool provides important information but does not provide a comprehensive perspective of the harder to see opportunity and accumulation costs of regulation.

10. Calculated by setting the governance index at the world median (0.46) using the method of estimation set forth by table 3b, and setting overall regulation to 0.1 to represent a ten percentage point increase along the study's index.

11. The act also established the scope of judicial review of agency actions and established standards for formal rulemaking and adjudication.

A marginal improvement over the current system, some administrations have directed agencies to perform retrospective reviews of regulations.[12] In their current form, retrospective reviews are intended to help regulators internally assess the efficacy of their rules. Reviews are intended to prompt modifications to regulations which do not have the intended effect. Current agency efforts at retrospective review have been haphazard and limited to small swathes of rules.

The regulatory budget component of legislative impact accounting focuses on the costs of regulations, as costs are easier to budget and provide a firmer constraint that cannot be offset by inflated benefits. However, legislative impact accounting as a holistic proposal is not intended as an indictment of all regulatory actions or a denial of the benefits that regulatory intervention may create. Many health and safety regulations' benefits may outweigh their costs, in much the same way that government spending on certain high return infrastructure can have economic benefits in excess of the cost. This is why our proposal includes analysis of benefits—to allow policymakers and regulators to better assess regulatory tradeoffs and prioritize their actions so as to maximize benefits.

The escalating size and scope of accumulated regulations, alongside mounting evidence of the negative consequences of regulatory accumulation on economic growth, implies a need to comprehensively assess both existing and future regulations within the budget process, with attention also given towards removing outdated, duplicative, or unnecessary regulations. The fact that regulations stem from legislation raises another set of concerns: does Congress consider these regulatory effects when it passes legislation and creates budgets for the creation and enforcement of its legislative progeny?

BACKGROUND ON BUDGETING

The current rules that underlie the scoring of legislation mask and understate the true direct cost on the federal budget, as well as legislation's indirect costs placed on the economy at large. In short, the full costs of legislation—especially regulatory costs—are hidden from legislators and not properly accounted for in the current budget process.

While Congress receives a few reports that include a small portion of the non-budgetary costs of regulation, non-budgetary costs are not properly integrated into the budget process. Congress requires administrations to report on the overall costs of regulations each year in the "Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities," these reports vastly underestimate the total costs of regulations as they rely only on the small percentage of regulations for which agencies actually perform cost estimates (Williams and Broughel 2014). The Unfunded Mandates Reform Act of 1995 (UMRA) requires CBO to provide cost estimates on certain mandates that impose costs on state, local, or tribal governments or the private sector. In 2017, these estimated costs exceed 78 million dollars

12. The latest attempt is Executive Order 13563 from President Obama. Exec. Order No. 13563, 76 Fed. Reg. 3821 (January 21, 2011).

for intergovernmental mandates and 156 million dollars for private-sector mandates (Jay Dilger 2017). The analysis that CBO has done under the UMRA serves as a decent guide to illustrate how analysis of broader economic effects of legislation can be implemented. CBO's analysis of these mandates has played an important political role in a minority of high-profile pieces of legislation (most recently the analysis of the Affordable Care Act and subsequent healthcare reforms). However, on the whole, these estimates are easily gamed because the definition of "mandate" is narrowly defined and they carry little weight because those cost estimates that are produced are not fed into the budget process in an enforceable way.[13]

The seeds of today's current budget process were sown with the passage of the Congressional Budget and Impoundment Control Act of 1974 (Budget Act of 1974). Now over 40 years old, the Budget Act of 1974 does not provide Congress with all of the tools necessary to fully understand and evaluate the costs of legislation and the fiscal challenges facing the country. However, the framework of the existing Budget Act of 1974 does provide a process that, if amended to include legislative impact accounting, would provide Congress with the necessary information to improve decision-making. The ability to authorize spending authority, both in terms of direct spending and indirect regulatory costs, gives Congress the power of the purse as an effective means to curb executive branch power.

Similar to regulatory costs, mandatory spending is currently walled off from the annual budget process. Mandatory spending makes up the vast majority of the federal budget and includes interest on the national debt, Social Security, Medicare, and Medicaid (U.S. Congressional Budget Office 2016). Annual appropriations deal with discretionary spending only. Funding for mandatory activities generally continues from year to year without a systematic trigger to require Congress to review the programs' design or budgetary cost. Regulatory costs are implicitly on this list of mandatory activities that are hidden from legislators and not properly accounted for or controlled in the current budget process. While it is paramount to account for all costs, our proposal for legislative impact accounting focuses primarily on regulatory costs.

Excluding costs of the regulatory burden from the federal budget process understates the true costs of legislation on the economy. Consider for example, the foreseeable economic consequences of federal renewable fuel standards. Congress justified its approval of renewable fuel standards legislation in 2005 on the projected environmental and energy benefits of substituting ethanol for fossil fuels (Abdukadirov 2013). By making this policy change through regulation rather than taxation, Congress avoided the benefit-cost analysis that would have allowed a side by side comparison of the projected benefits and costs of a policy that negatively impacts consumers, particularly the poor, by raising the prices of commodities and food products. The benefits may have still outweighed the costs, but the current system did not permit such a discussion.

A full accounting of the direct and indirect costs of a bill's likely regulatory progeny could help better inform legislators who are deciding whether a bill promotes the economic

13. There are 14 different definitions, exceptions, and exclusions that allow a rule to not be identified as containing a mandate (Fantone 2011; Joyce 2015).

objectives.[14] Without an understanding of the full costs of the regulatory burden associated various policies, legislators may be left with no choice but to proceed in ignorance of the full costs of legislative actions, or even worse, may resort to relying on misinformation and rhetoric.

LEGISLATIVE IMPACT ACCOUNTING IN THE FEDERAL BUDGET PROCESS

The previous sections highlighted, in just a few examples, the need for reform of both the budget process and the regulatory process. Legislative impact accounting reforms both processes to systematically include the economic costs of regulation through a regulatory budget and retrospective reviews.

Legislative impact accounting is a reform which builds on other's proposals to create an economic cost account to mimic a budgetary constraint. Called a "regulatory budget," proposals often follow the contours of the current budget process where Congress sets budgetary limits on agency program spending. A constraining economic cost account or regulatory budget would provide upper limits on the costs associated with agency actions. This would include agency actions related to regulations, such as the costs of new rulemakings, the ongoing costs of existing rules, and the implicit costs of quasi-regulatory documents if they have the effective force of regulation.[15] A full economic cost account would also include the costs of loan guarantees, subsidization, and other actions with hidden effects on the economy not accounted for in traditional ledgers.

The budgeted economic costs of regulation would be allocated to each agency and agency function based on congressional priorities. A federal regulatory budget would force agencies and the legislature to explicitly account for the opportunity costs of regulating one activity over another. Legislative and regulatory actions are always constrained by time, money, and personnel resources. A regulatory budget introduces an additional constraint to help agencies better use current cost-benefit analysis tools. A hard regulatory cost constraint, paired with an agency mandate to maximize net benefits under the cost constraint, would create an incentive for internal stakeholders to use cost-benefit analysis to evaluate and make tradeoffs between important but costly regulatory priorities.

Under a regulatory budget, the RIA could become a central tool for agencies to decide which new or revised regulations will have the largest benefits in relation to the costs imposed on

14. For an overview of the history and rationale for including direct regulatory costs in the budget process see, Rosen and Callanan 2014). While Rosen and Callanan discuss various efforts to include direct regulatory costs in budgeting, they do not consider the cost of regulatory accumulation.

15. Graham and Liu (2014, 425) note four types of regulatory and quasi-regulatory activities whose costs are not assessed in existing administrative procedures: "(1) agency issuance of quasi-regulatory documents such as memoranda, policy statements, and guidance documents; (2) agency approval of state regulatory policies under federal laws that authorize selective waiver of federal preemption of state regulation; (3) federal agency issuance of hazard determinations related to technologies, substances, and practices that impact the litigation and regulatory environment; and (4) federal agency decisions to enter into binding agreements with pro-regulation litigants favoring certain regulatory outcomes, where settlements create nondiscretionary agency duties to initiate new rulemakings."

individuals and the economy (Crews 1996). Under the current system, an agency may regulate a low-risk hazard at great cost to the economy because personnel and budget costs to implementation are lower than regulating some other, higher-risk hazard. The additional constraint of a regulatory budget would allow agencies to better prioritize their efforts and maximize the benefits of regulation.

Regulatory budgets set by a Congress with better information would serve to reform the incentives internal to agency decision-making. Legislative impact analysis would extend similar reforms to congressional decision-making by closing the information loop through the introduction of systematic prospective and retrospective reviews. The additional review processes will directly inform the setting of regulatory budgets. The cost estimates are key for any budget process and thus receive most of our attention. However, the prospective and retrospective reviews should also contain benefit estimates to help Congress set priorities in their appropriations process.

LIA: Integrating Retrospective Review into Regulatory Budgets

The process of legislative impact accounting would conform closely to the budget processes used for traditional government outlays. Just as the Budget Act of 1974 created the CBO, the implementation of LIA will require a congressional regulatory review shop to produce independent costs analysis of proposed and existing legislation. Regulatory and legislative cost assessments will be included in three main processes: authorization, appropriation and retrospective review.[16]

An independent congressional regulatory review process is paramount to honest cost estimates. McLaughlin and Williams (2014) discuss at length the reasons why regulatory agencies should not be expected to provide the best estimates of the costs of their own regulations. The newly created regulatory review shop could report to the director of the CBO and perform scoring functions of regulations as they currently score traditional budget effects. CBO's initial legislative score would be independent of agency estimates. CBO should produce independent cost estimates for all proposed and finalized rules, or at least all significant rules. CBO should also lead the process of retrospective review. In this new capacity CBO would play an integral role in scoring all regulatory costs, just as they currently measure revenues and outlays.

The most difficult part of implementing a regulatory budget, and a point of valid criticism, is the actual procedures used to estimate regulatory costs. As outlined above, indirect regulatory costs can be counted through various measures of compliance costs or by an estimate of the opportunity cost. The simplest unit of measurement is regulatory restrictions. Measurement of regulatory restrictions depends simply on the text of regulations rather than on any estimation of cost associated with regulations. A version of this method was and continues to be used by the government of the province of British Columbia in Canada (Jones 2015). A regulatory

16. The discussion of authorization, appropriation and budget enforcement draws heavily from Fred Thompson (1997).

restrictions budget would set macroconstraints by assigning each agency a number of restrictions which they are responsible for administering.

The regulatory restrictions macrobudget constraint could be implemented immediately. Simple restriction counts for each agency are already publicly available (Al-Ubaydli and McLaughlin 2014). Budgets could be set at current levels and appropriators could reduce restriction counts in future budget years, requiring agencies to find, review, and eliminate a set number of restrictions. This method may seem crude, but restriction counts can be systematically assigned to original authorizing legislation and to the responsible agency. Appropriators can use legislation specific restriction counts to determine if a program should indeed require the current level of restrictions.

Paired with a restrictions budget, a more sophisticated level of opportunity cost budgeting should be implemented for all future legislation and all current regulations that have been deemed significant under Executive Order 12866 (1993).

Authorization. All regulation is the progeny of legislation authorizing the purpose and techniques employed by the responsible executive agency. Under LIA Congress would also include in all new authorizing legislation limits on the economic costs the regulatory agency could impose on individuals, businesses, and state and local governments. When a bill is proposed, CBO would score both the budgetary impact and the economic regulatory costs of the bill to set initial limits on economic costs. Authorizations could provide permanent, multi-year (similar to including a sunset provision, requiring periodic reauthorization), or annual regulatory cost authority. Congress must also stipulate a retrospective review schedule, for systematic oversight of past legislative actions.

The initial CBO regulatory cost score would initially follow the same cost estimation guidelines from Executive Order 12866 and OMB Circular A-4. All new legislation would require a new authorization for the opportunity cost budget as well as an allocation in the restrictions budget. Over the first 10 years of the regulatory budget, each of the significant regulations to receive a RIA under EO 12866 would receive a retrospective review and would be formally included in the opportunity cost budget process.

Appropriation. The creation of the President's budget would include reviewing all proposed rules for the coming year and related cost estimates assembled by each agency. The budgeting process would require the administration to make tradeoffs taking into consideration alternative regulatory proposals, authorized restriction limits, and total regulatory cost. The President's budget's regulatory costs would be informed by each agency's internal cost and benefit estimates and reviewed by CBO. The President's budget would be submitted to Congress with the restrictions and costs of all regulations assigned to one or more budget function.

In response to the president's budget, Congress would pass a budget resolution that sets revenue, spending, and regulatory cost and restriction totals for the coming fiscal year. Working within the budget resolution framework, Congress would pass appropriations bills authorizing agencies to, use their budgets, enforce existing regulations under budgeted cost caps, and propose new regulations which would impose new costs on individuals and businesses. Budget committees in consultation with CBO would review and modify each agency's regulatory budget in accordance to legislative priorities, which could be informed by accompanying benefits estimates. Similar to current budget norms, most budget authority would require annual authorization as most regulations are already fully implemented and just require ongoing cost allowances. Large projects or complicated new regulatory initiatives that take many years to implement may require multi-year authorization. Some low priority initiatives may get no appropriations in a given year and the constraint of the appropriated costs would supersede the law mandating the regulation.[17] These additional budget lines will likely require additional appropriations staff, and may change relative power dynamics between committees as the regulatory budget expands the appropriator's jurisdiction.[18]

Retrospective Review. Academics and policymakers have advocated for a more comprehensive use of retrospective review both for internal agency deliberation and congressional information. Legislative impact accounting would uniquely incorporate retrospective review into the setting and revising of regulatory budgets. This would leverage the review process as an effective tool to feed useful information back to Congress, into the budget process, and to regulators. Legislative impact accounting would uniquely close the regulatory information loop.

An agency's regulatory budget would initially be based on the cost and restrictions estimates produced by CBO for new rules and estimates of existing regulatory costs. Following the congressionally mandated review schedule assigned during authorization, agencies would review the rules by updating the accompanying RIA and assessing the effectiveness of the rule in accordance to its legislative objectives. Unlike opportunity costs that are harder and more time consuming to measure, the budget for regulatory restrictions would be monitored and revised in the annual appropriations process.[19] The updated cost information would then be reviewed and revised by CBO and presented to Congress. The updated cost account would be fed into the regulatory budget. The updated costs account would allow future appropriations to be allocated according to regulatory outcomes. All current significant regulations would also receive a retrospective review in the first 10 years of implementation. Once LIA is fully implemented any qualifying regulation without a retrospective cost account should be suspended until the agency and CBO can complete a thorough analysis.

Legislative impact analysis will give Congress and agencies the benefit of systematically looking back over previous regulations. The current lack of a systematic retrospective review process has led to the accumulation of regulations that fail to achieve the intended outcomes.

17. In the same way the debt limit constrains spending that is otherwise mandated in law, a regulatory cost cap would also be a superseding binding constraint. This paper does not address the important role of the Judicial Branch in enforcing a regulatory budget. This topic deserves its own separate analysis by scholars with the relevant subject matter expertise.

18. Ideally, all government spending (mandatory and discretionary) and all regulatory costs would be included in the normal budget process and subject to annual review. Any change that brings mandatory spending into the budget process will also increase the role of appropriators.

19. In fact, the advent of the eCFR makes it feasible to update restriction counts on a daily basis, as shown on the website QuantGov.org.

Over time, Congress would be able to study whether initial RIAs offer reasonable predictions of benefits and costs. As agencies work under their regulatory budget constraints to adopt new regulations they will be able to modify or cancel old regulations which are no longer effective or duplicative. Legislative impact accounting could initiate the creation of a systematic process, overseen by Congress, to increase understanding of whether existing regulations have been effective, efficient, and equitable, and what economic outcomes the regulation led to.

The Feedback Loop

Legislative impact accounting's most important and novel feature would be the formation of a feedback loop that communicates information about economic effects—both benefits and costs—to Congress. Its other main feature would be the implementation of legislative impact analysis for proposed legislation—this would consider economic costs, not just budgetary outlays.

The current life of congressional action, from proposed legislation to final regulation is shown diagrammatically in Figure 2. The analysis provided lacks necessary information about off-budget costs. The "legislative analysis" currently conducted looks only at budget costs. Agency RIAs are carried out but never systematically shared with Congress; and retrospective reviews play a minimal role.

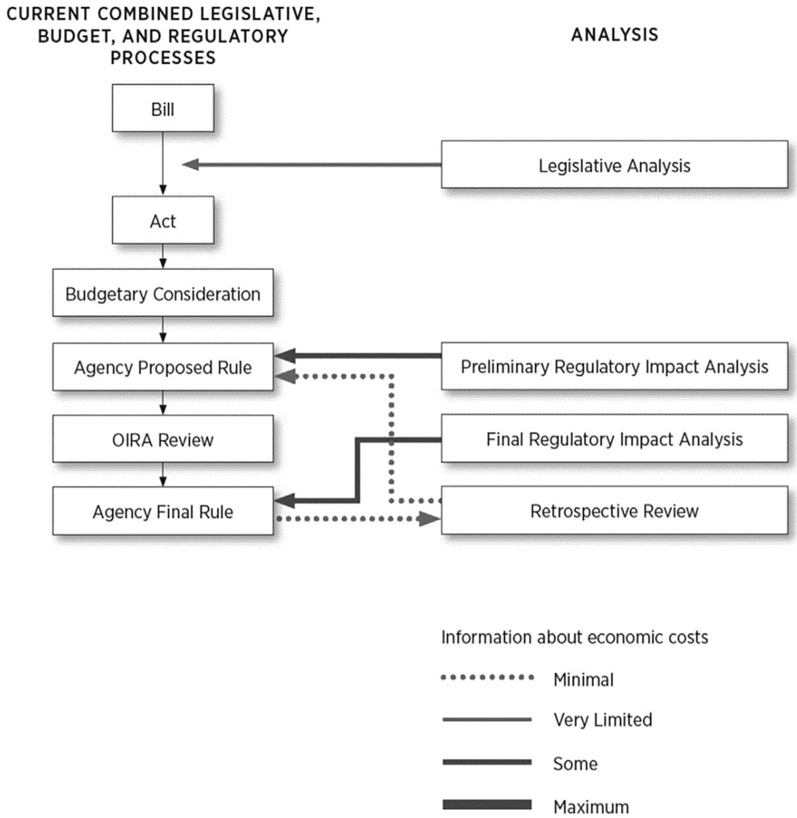
Legislative impact accounting implements a regulatory budget and two additional regulatory review steps. Figure 3 shows how both of these features would fit into the existing process. All proposed bills would receive a formal legislative impact analysis by CBO before they are considered for a vote. Upon enactment, CBO would produce preliminary and final RIAs. Agencies could still produce their own RIA, as OMB produces an independent budget, for internal decision making. Lastly, CBO would work with the agencies to carry out retrospective reviews which would feed back into the yearly regulatory budget process.

Legislative impact accounting would allow Congress to conduct oversight of agency regulatory activity in a manner similar to the conventional agency budget.[20] For example, an agency could not proceed with a set of regulations that exceed the applicable account limit without engaging with Congress on why its chosen path of action is necessary to fulfill the intent of specific legislation. This would create occasional conflict. An agency might propose a regulatory course whose economic costs exceed the amount estimated and allocated to it in the prospective analysis and budgeting stages of the process. Is that the fault of the agency, or of the underlying statutes themselves that are inducing the agency to chart this regulatory course? Such conflict would have to be settled before the budget committees, and although painful in the short run, the conflict should eventually expose the source of cost overruns as either the fault of poor congressional cost anticipation or of poor agency execution.

The potential conflict that will result from mismatched cost and restrictions estimates and actual proposed regulations is a feature, rather than a deficiency, of legislative impact accounting.

20. There is evidence that Congress, especially congressional committees and their professional staff, use policy analysis for political advantage both internally and to inform voters. It is also clear that CBO scores of budget impact do influence congressional debates and ultimately can change policy, both in anticipation of the score or in reaction to the score (Shulock 1999; Weiss 1989; McCubbins et al. 1987).

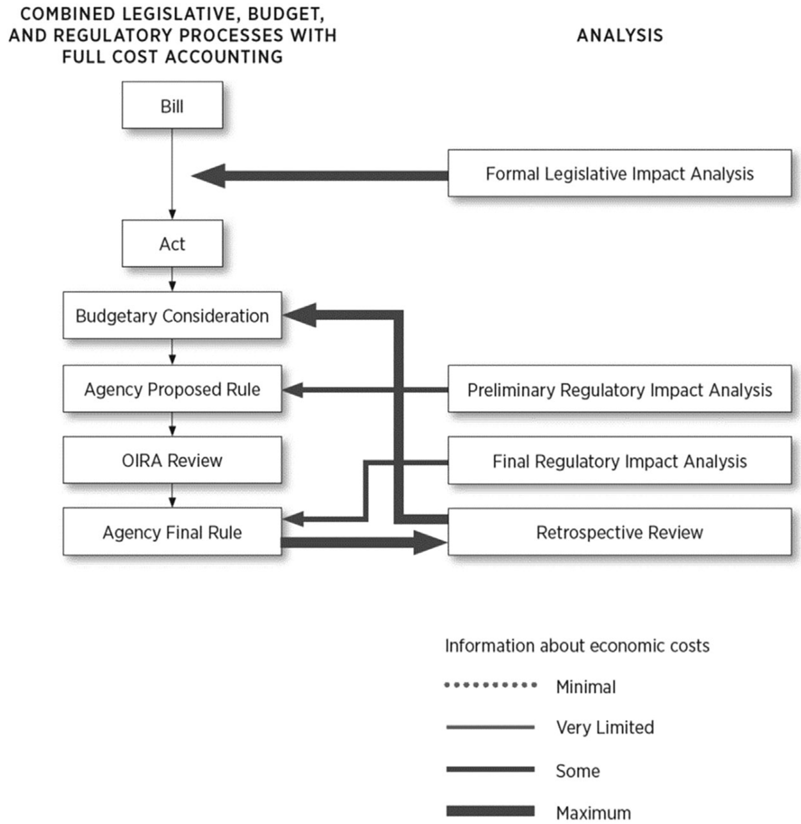
FIGURE 2
The Life of a Congressional Action, from Bill to Law to Regulation.



Appropriately estimating the direct costs of legislation is challenging, and estimating the associated full economic costs and restrictions is an even more uncertain exercise. If an agency requires additional budget authority they can request it from Congress. This is a useful mechanism to help Congress exercise oversight of the delegated activities relating to the regulatory progeny of legislation. If an initial CBO score significantly underestimated the costs, then it should be beneficial for Congress to reassess their original decisions. Appropriators could then either appropriate the additional budget authority, or Congress could reassess the underlying statute with the additional and more accurate information on the costs and benefits of implementation.

Legislative impact accounting would, therefore, set in motion a necessary feedback loop. Initial estimates of the full costs of a public law could be compared to actual costs that materialize from that statute's regulatory progeny. And the feedback would not necessarily be restricted to costs—if regulations do not achieve the benefits desired, Congress can use both its oversight and legislative powers to take corrective action. Perhaps more importantly, under a comprehensive

FIGURE 3
Legislative Impact Accounting in the Life of a Congressional Action.



economic cost account, agencies would have more incentive to identify and modify or eliminate regulations that do not achieve the desired outcome.

The benefit of developing a legislative impact accounting process parallel to the traditional budget process is that it allows for a holistic approach to, and consideration of, the federal budget; all regulatory costs would be considered alongside conventional spending bills. A parallel legislative impact account in the budget that includes the costs of regulation, loan guarantees, federal subsidy payments, and even the compliance costs of taxation, alongside the conventional spending budget, would strengthen political accountability over both the rulemaking process and the federal budget process.[21] The entirety of the federal government's impact on society and the economy would be debated holistically.

21. Donald Marron (2014) has an excellent proposal for how the federal government should properly account for the cost of federal loan guarantees. Alston and Hurd (1990) estimate the additional indirect costs of government farm subsidies and find a direct dollar cost of government spending is more likely to be in the range of $1.20 to $1.50. Fichtner and Feldman (2013) find that the hidden costs of tax compliance could top 1 trillion dollars.

Measuring Costs

The literature is in general agreement that regulatory budgets should appropriate costs only. Executive agencies are already prohibited under Executive Order 12866 from enacting regulations whose costs are greater than the benefits. As a practical matter, a regulatory budget which allows costs to be offset by benefits would provide no additional constraint on agency regulation. Under a cost and benefit regulatory budget agencies could receive zero regulatory appropriations and continue to issue new rules without any changes to their current processes. A costs only regulatory budget does not eliminate cost-benefit analysis. As described above, a regulatory budget would allow cost-benefit analysis to be used by agencies as a tool to more effectively decide which regulations to prioritize as they work to maximize regulatory benefits or other policy objectives.

The basic justification for including just the costs of regulation is quite simple: government regulation is the economic equivalent of government taxation and spending.[22] The traditional budget process does not offset government spending with the expected benefits, although there are surely expenditures leading to benefits that outweigh their costs. For example, federal research and development funding implicitly assumes the benefits from new innovations will exceed the direct expenditure. The process of budgeting requires policymakers to acknowledge scarcity and forces conflict between competing interests (Thompson 1997; Wildavsky and Jones 1994). The budget process does not deny the existence of benefits. Therefore, policymakers should treat regulation as they do government taxation and spending, by formally accounting for the costs while also recognizing the potential benefits.

Additionally, quantifying regulatory benefits can be a more difficult task than estimating costs, which opens the door to inflated benefits estimates. Former OIRA Administrator Susan Dudley (2012, 175) explains that a few categories of benefits with “questionable legitimacy” can inflate benefit estimates by a factor of five or more. If benefits were allowed to offset costs in a regulatory budget, scorers could face strong political pressures to inflate benefit accounts. Including benefits in a regulatory budget would neuter the proposals’ effectiveness.

Costs can also be difficult to measure, and even the accounting of direct costs imposed by regulatory compliance can be challenging. However, indirect costs to economic growth and opportunity costs of forgoing a better alternative are much harder to estimate. In RIAs, economists try to predict how regulated entities will react to regulatory requirements, and it is not always straightforward, even for individual requirements.[23] For example, firms may comply exactly, may cease production or go out of business, or may move their business overseas as a result of a regulatory requirement. Unintended consequences, like the use of more acutely toxic

22. Fiscal budgets and regulatory budgets will not be identical as there are many differences in how exactly regulatory costs are tabulated that differ from the more straightforward fiscal budget. However, Congress should be informed about the costs of both regulation and taxation (most accurately measured through spending) and manage them with similar tools, even if some of the detail of implementation diverge.

23. Regulatory impact analyses containing benefit and cost estimates are not published for the vast majority of regulations. Between 2003 and 2012, 0.3 percent of rules monetized estimates of both benefits and costs of federal regulations (Williams and Broughel 2014).

organophosphates following the ban on DDT, present yet more difficult challenges to estimating the consequences of subsequent regulations (Gray and Graham 1997).

The cost estimation procedures currently used in RIAs may be flawed, but they remain useful and informative.[24] The regulatory cost budget does not require a precise cost estimate, but instead the estimate creates a reference point for future retrospective analysis check-in points. The creation of ongoing cost estimates, updated with evolving industry information as firms take action in response to regulations, provides a systematic assessment of the legislation's impact. Relatively more complex cost estimates are paired with the simple and verifiable method of counting and budgeting regulatory restrictions to create a simpler and easily assessed metric to implement a formal and regular constraint on regulatory accumulation. While the available methodologies associated with legislative impact analysis are far from settled, most any method of creating an economic cost account could help improve the state of regulation in the US.

Other Countries' Informative Experiences

European states have begun experimenting with quasi-regulatory budgets and initial legislative impact assessments. The Netherlands has explored constraining regulatory administrative burden alone. They have developed an administrative cost calculator into a model for calculating the paperwork costs of compliance with regulations. The model has been used in the Netherlands to require a 25 percent reduction in administrative costs stemming from regulations (McLaughlin and Williams 2014). The United Kingdom has implemented a one-in, two-out regulatory reform program which essentially caps net regulatory costs imposed on businesses.[25] In a review of regulatory budgets Rosen and Callanan (2014, 859) explain that "The U.K. experience to date suggests that some form of regulatory budgeting – long the subject of academic commentary—can work in practice."

The analysis of the anticipated benefits and costs of proposed legislation is also not unprecedented. The European Commission provides impact assessments on all legislation considered by the European Parliament. These assessments include estimates of administrative costs, and can also focus, depending on the legislation, on assessment of other economic, social, or environmental impacts (O'Connor, Close and Mancini 2007). Furthermore, the European Commission's approach involves assessing all prospective legislation, which could represent a significant strain on resources.

European Commission guidelines address scarce personnel resources for scoring in two ways. First is the principle of proportionate analysis, which states, "Any analysis should not go beyond what is needed to have a reasonable assessment of the likely impact" (O'Connor, Close and Mancini 2007, 11). Second, the European Commission's guidelines take into account the availability of data that could be useful for quantitative analysis, leading to greater allocation of resources to those problems that are quantitatively tractable.

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24. The current cost estimation process is far from perfect and should be improved. The specifics of how to improve the process have been discussed elsewhere (Ellig 2013; Hahn and Litan 2005).

25. In fact, at various points in time, the UK followed a one-in, one-out policy, a one-in, two-out policy, and even a one-in, three-out policy (Department for Business, Innovation and Skills 2013).

It is not clear how accurate or useful the EU analyses are, however. Some researchers have found that European Commission legislative impact analyses are generally less informative than RIAs performed in the United States (Lee and Kirkpatrick 2004; Lussis 2004; Renda 2006). However, others have found the quality of these analyses varies proportionately with the economic significance of the proposed legislation, and costlier legislation is generally accompanied by analysis that is similar in quality to RIAs that accompany major regulations in the United States (Cecot et al. 2008).

In 2001 the Canadian province of British Columbia began to implement a regulatory restrictions budget similar to part of our proposal. British Columbia's government counted the number of "regulatory requirements" and required agencies to track reduction of the requirements against a baseline. The simple measure, paired with a clear target of reducing one-third of requirements from the baseline, shifted agency culture away from regulatory expansion and towards regulatory management that clearly distinguished between unnecessary "red tape" regulation and necessary or desirable regulation (Jones 2015).

Legislative impact analysis uniquely incorporates the hard budget caps used in the UK and British Columbia and prospective review used in the EU with retrospective review in one holistic process. The feedback of retrospective review will enable future prospective analyses to better gauge the impact of proposed legislation. As cost estimation is systematically improved and regulatory restriction budgets are enforced, Congress could have a powerful new oversight tool for better decision making.

CONCLUSION

Proper budgeting requires planning, setting priorities, and making decisions. Budgeting is about making trade-offs between competing wants and limited resources—but these decisions cannot be made in the absence of complete and proper information on how various policy decisions will affect the economy and the US budget position. Regulations relate to this process by virtue of creating benefits and costs to the economy as a result of legislation. However, complete and proper information about regulatory costs are largely missing at the time of congressional deliberation but are needed if Congress is to make better-informed decisions. In short, Congress's information regarding the future social and economic effects of their policy decisions is almost non-existent at the time of passage.[26]

We have proposed legislative impact accounting as a remedy to the current regulatory processes' twofold problem of nonfunctional rules and regulatory accumulation. Legislative impact accounting is primarily a process of information creation combined with a regulatory restrictions macroconstraint. It entails the creation of a feedback loop

26. Admittedly, the Congressional Review Act may have been intended to fulfill this role, but the Congressional Review Act has been used to stop an agency rulemaking only once in thousands of chances through the 114th Congress, and 14 times by the end of fiscal year 2017 (September 30, 2017) in the 115th Congress under Republican control seeking to overturn some politically charged regulations made at the end of the Obama Administration.

that communicates information about economic effects of regulations, and, by extension, the legislation that enabled those regulations, back to Congress after regulations' effects are better known. Legislative impact accounting's other main feature is the implementation of legislative impact analysis—which would attempt to consider economic costs, not just budgetary outlays—of proposed legislation. In our proposal, all of this information would be formally incorporated into the budget process as a constraining economic cost and restriction account.

Budget process reform is not just about getting a correct picture of the fiscal and economic impact of legislation and spending bills; it's also about good governance. Unfortunately, the debate surrounding legislative impact accounting and similar regulatory reform proposals is often polarized into two opposing sides; one promoting deregulation and the other promoting further regulation. However, without a legislative impact accounting of the actions of government, ill-advised or bad policies may be adopted with harmful consequences, resulting not only in lost economic output but also an erosion in public trust of government to govern efficiently and equitably.

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