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Making Better Budget Decisions Easier: Some Changes Suggested by Behavioral Research

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Executive Summary

Judged by the objectives of federal budgeting—economic stability, efficiency, and equity—the current federal budget process is broken. Deficits, and an increasing future tax burden implied by the growth of U.S. debt, threaten both short- and long-term stability. "Government efficiency" has become a reliable crutch for stand-up comics. Poverty abides. Meanwhile, Congress often fails to adopt a budget resolution or to complete appropriations before the start of the fiscal year.

Many proposals to modify the budget process and improve budget outcomes are already on the reform agenda. This paper applies some relatively recent findings from behavioral research to the reform effort and suggests a set of proposals based on this research. We note the systematic cognitive limitations of human decision makers and seek to identify modifications in the decision process that have succeeded elsewhere in aligning decisions more closely with long-term well-being. Generally, we aim at changes in the decision framework that would make better decisions easier for both policymakers and the electorate. Using insights from behavioral research, we recommend reforms that would:

- *Add a long-term constraint to the budget process.*
- *Cash out the cost of mandatory spending as it accrues.*
- *Increase the salience of the cost of tax expenditures.*
- *Increase the use of performance information in decisions.*
- *Create legislative speed bumps to slow fiscal errors.*

Most of our recommendations would increase the flow of relevant information so that it is salient at critical points of the budget process. We focus specifically on changes that would enable legislators and constituents to integrate more easily the long-term budget constraint into their decisions, observe the relevant, controllable costs of mandatory spending and tax expenditures, assess the likely beneficial effects and trade-offs of budget choices, and slow the enactment of policies that would conflict sharply with fiscal and economic stability.

Introduction[1]

Since the loss of the "balanced budget norm" and the rapid rise in social welfare spending following World War II, many democratic governments, the U.S. included, have had difficulty maintaining long-term balance between spending and the taxes that the electorate is likely to agree to pay. Because deficits are now seen as an appropriate means of "balancing the economy," the objective of fiscal balance has lost much of its primacy. And sometimes, independently of the business cycle, policymakers across the political divide find themselves drawn by the political appeal of tax cutting or enacting new spending programs without serious thought of paying for it. The absence of a visible aggregate constraint to force choice also weakens the incentives of decision makers to improve the efficiency of individual government policies.

Previous efforts—primarily the Congressional Budget and Impoundment Control Act of 1974, as

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[1] This paper is based on "Federal Budget Reform: A Behaviorally Informed Approach," *New Ideas for Federal Budgeting: A Series of Working Papers for the National Budgeting Roundtable,* George Mason University 2016 (Hearn and Phaup, 2016). See http://www.budgetingroundtable.com/new-page-1 .

subsequently modified by the addition of sequestration, multi-year discretionary spending caps, and pay-as-you-go (PAYGO) —have attempted to strengthen budgetary discipline and improve fiscal decisions. Despite those reforms, federal fiscal policy continues on an unsustainable long-term trajectory. That path exposes the U.S. to an elevated risk of fiscal crises and deprives the government of the flexibility to respond to unforeseeable, but inevitable, future shocks. In a phrase—the current federal budget process is producing fiscal decisions that likely will be disappointing to both our "future selves" and our heirs.

What Are We to Do?

There is no shortage of remedial proposals: constitutional amendments requiring some form of balanced budgets; binding tax, expenditure, and debt limitations; re-structured congressional committees; biennial budgeting; a statutory budget plan; increased fiscal authority for the President; changes in electoral processes and congressional districting; re-invigorated PAYGO; "no resolution, no recess" or "no resolution, no pay" Congressional rules; and automatic continuing resolutions.[2]

Our view. While analysis and debate of those proposals proceeds, in this study we focus on a different potential source of process failure and improvement. Our view, based largely on behavioral research, is that the current budget process is producing poor fiscal results because it demands too much of its practitioners and the voting public in terms of human cognition, mental energy, and systematic analysis. Making informed decisions consistently in the existing process requires frequent, extraordinary effort by decision makers.

Limitations of human decisions. Elected officials and the voters who choose them are, first and foremost, human beings. As long suspected, and now confirmed by behavioral research, we homo sapiens are not by habit or inclination consistently rational, calmly calculating, or fully informed in the choices we make. While some of our decisions are made carefully, others are more reflexive than reflective. Further, the effort we put into a decision appears to be largely unaffected by its importance for our future, such as whether to participate in a retirement savings plan.

We choose badly, for example, when we succumb to an impulse to favor present benefit over future gain, even at a disproportionate long-term cost. Eating a sugary, fatty snack later in the same day that we carefully chose fat-free milk for our breakfast of oatmeal and fruit comes to mind. Consuming all our income rather than saving part of it, even when we can anticipate the likely consequence, is another example. And we sometimes double-down on an error by deciding that we are too tired, busy or late to exercise today, confident in our optimistic expectation that tomorrow we will have more energy, fewer tasks, and more time. We risk bad choices when, instead of gathering relevant information and thinking carefully, we choose the option that is easiest, "feels right", or has been previously chosen by friends.

We observe similar decision errors in the current budget process. Even though current budget policy runs an increasing risk of catastrophic financial crises,[3] Congress acts as though the debt trajectory means no more than an inconvenient February snow that will disappear before the arrival of spring. Or, as Dickens' always-in-debt character from David Copperfield, Mr. Macawber, optimistically puts it, "something will turn up." It is much easier, and the short-term benefits more attractive, for the Congress to decide to borrow now and give public money away through new spending and lower taxes than to make a decision to pay for the new benefit by cutting lower-valued spending or raising taxes. Yet, those "easy" decisions today increase the chances that government will be unable to honor its commitments—that is, the government will be more likely to fail.

Improving Decisions through Process Design

Behavioral research[4] has provided systematic, replicable evidence of our tendencies toward limited self-control, present bias, narrow framing of the costs and benefits of decisions, distaste for data and analysis, viewing the future with excessive optimism, and aversion to the loss of gains that we have already mentally added to

2 Rivlin, Alice M. and Pete Dominici. 2015; Posner, Paul, Steve Redburn, Phil Joyce, and Roy Meyers. 2012.

3 Burman, Leonard E. and Marvin Phaup. 2012; Minarik, Joe. 2011; Elmendorf, Douglas and Louise Sheiner. 2016.

4 Kahneman, Daniel. 2011; Thaler, Richard H. and Cass Sunstein. 2008; Sunstein, Cass R. 2013.

our stock of "owned" assets. This research also demonstrates that our errors are systematic and predictable—for individual and group decisions.[5] Understanding the conditions that make errors more or less likely enables us to structure decision processes to reduce the frequency and severity of poor choices. This research suggests that better decisions are made easier by:

- Pre-committing to actions consistent with our most important goals, followed by frequent, credible feedback;
- Framing current decisions as a means of avoiding the losses that result from poor choices;
- Providing decision makers with highly relevant information in a hard to ignore form;
- Using language and measurement to bring the future closer to the present; and
- Creating procedural "speed bumps" or delays for decisions likely to be inconsistent with our most important goals.

We develop specific proposals for budget process reform by first identifying the essential information requirements for effective budgeting. Second, we assess the information currently provided to budget framers in terms of the adequacy of its coverage and salience. Third, we use behavioral principles to specify process modifications that appear likely to improve federal budget decisions by increasing the availability and salience of the requisite information.

Essential Information Requirements for Budgeting

The standard economic model of choice under a scarcity constraint identifies the information that is necessary, though by no means sufficient, to enable budget framers to make choices consistent with the objective of maximizing net social benefits from limited resources: a measure of available resources over the planning period; the full resource (or opportunity) cost of every choice; and the expected benefits from each use of resources.

1) What is the long-term public budget constraint? Scarcity is the fundamental condition of economic life. Resources are limited. Nothing is free. Every use of resources has a cost in terms of the highest alternative value foregone. Every use of resources, including government's, must be paid for in alternatives forgone by someone. For government, the long-term budget constraint consists of the taxes and other sacrifices of resources that voters are willing to agree to now and in the future. A working approximation for that limit is the present value of future flows of resources to the government under current law.

2) What are the "full, upfront" costs of a decision to use scarce resources for a specified purpose? The relevant measure of costs for budgeting is prospective. It is the best estimate of the value of resources that will become "sunk," or unrecoverable for alternative uses, at the point of allocative choice.[6]

3) What are the expected benefits from a specific use of resources? To judge the social desirability of an allocative choice, it is necessary to have information on the expected performance or value for money from each use of resources.

Adequacy of Current Budget Information

A casual examination of the current federal budget process suggests that none of these minimal information requirements are met consistently and in a useful form today for either policymakers or the public. That is unfortunate because, if information that is highly relevant is even slightly difficult to discern, it is not often used in decisions.[7] By contrast, decision makers are more likely to use relevant information if it is presented in such a way that is difficult to ignore.

1. <u>Budget Constraint.</u> Budget framers today appear to lack awareness of the fact that federal resources are limited and that borrowing is not a permanent, costless alternative to taxation. This is hardly surprising given that no measure of the long-term constraint is included in budget deliberations.

The Congressional Budget Office (CBO) usually issues its budget projections for spending and revenue in January—with updates in March—using 10-year baseline projections that focus on

[5] Cohen, Geoffrey. 2003; Kahneman, Daniel. 2011; Sunstein, Cass R. and Reid Hastie. 2015.

[6] This is the generally accepted and functionally appropriate matching principle for federal budgetary accounting, that is, match cost recognition with decision. See, for example, "Budget Concepts," Analytical Perspectives, Budget of the U.S. Government, FY 2016, Chapter 9, p. 99.

[7] Coronado, Julie, Olivia Mitchell, Steven Sharpe, and Blake Nesbitt. 2008.

deficits and debt for that period, without reference to a fiscal limit.[8] Subsequently in the summer, CBO issues an annual report with long-term (25-year) projections of annual deficits, which includes measures of the fiscal gap (present value of projected revenues less the present value of current law spending) and the publicly-held debt.

The annual CBO report on long-term projections also shows debt as a share of GDP rising over time without limit, a condition described by most economists as unsustainable. But by the time that report is issued, Congress has already adopted the annual congressional budget (if it manages to do one at all). At the time they are preparing their budget, congressional decision makers show little apparent concern for compatibility between their budget's spending and tax targets and a legislated or effective debt ceiling. While they may acknowledge that decisions today may impinge on choices sometime in the optimistically discounted future, they make decisions as if there is no limit on what is fiscally affordable today. There are, in practice, no trade-offs in a budget process without a long-term budget constraint.

2. <u>Costs.</u> The budget primarily uses cash-basis accounting to measure costs—with important exceptions, including the use of accrual-basis accounting for federal direct loans, loan guarantees, and lease-purchases of buildings. For annually appropriated, discretionary programs, the budget places a limit on and then tracks the creation of budget authority, which is the authority to enter into obligations that lead to outlays. This procedure provides policymakers with an approximation of the full, upfront costs of most decisions affecting discretionary spending. Thus, it is relatively easy for Congress, the Executive Branch, and the interested public to understand the discretionary costs that will become sunk and beyond recovery during the current budget period.

For many mandatory spending programs and tax expenditures, however, current accounting fails to inform users about relevant, currently controllable costs. For mandatory spending, cash-basis accounting focuses attention on costs that were sunk in years past and are now being liquidated. As a consequence, it confronts those budget makers who wish to reduce the contribution of mandatory programs to fiscal imbalance with a politically difficult choice: either cut promised benefits now just as they are about to be paid or raise taxes now to keep pace with the growing future obligations. A human response to this choice is to delay a decision (i.e., to procrastinate) even though the required adjustment will be larger and more politically difficult in the future.

For tax expenditures, failure to show costs on the spending side of the budget encourages the view that spending through the tax code is not spending at all and is, therefore, costless. This budgetary treatment creates a bias in favor of tax expenditures at the expense of cash spending and deficit reduction.

<u>Mandatory Spending Example: Deferred Compensation.</u> Federal civilian employees[9] supply labor services in exchange for an agreed total compensation, some of which is paid now as wages and salaries and contributions to retirement savings, but some is deferred, appearing in the budget as an outlay "cost" many years in the future. Specifically:

- Federal agencies pay salaries as they are earned, and those payments affect outlays and the deficit in the year the government commits and pays. Thus, reducing the number of employees today, for example, would almost immediately lower cash budget outlays for wages and salaries, as well as the budget deficit.
- Federal agencies also make payments on behalf of employees to their defined-contribution retirement accounts under the Thrift Savings Plan (TSP). Those payments are also recorded as budget outlays at the same time salaries are paid, as they are made to those "outside the government."[10]

[8] COB's *Budget and Economic Outlook: 2016-2026* also includes 10 year averages for outlays, revenues, deficits, and debt for 2027-2036 and 2036-2046.

[9] Military service members also earn a mix of current cash and deferred compensation. That system of deferred compensation, however, differs from the civilian system sufficiently that, for simplicity, it is not outlined here.

[10] Technically, these payments are made to a non-budgetary deposit account in the "means of financing the deficit" section of the budget. This section of the budget includes a number of asset and liability accounts. Asset accounts include balances of monetary assets and outstanding direct loans to the public. Liability accounts include accrued but unpaid interest on the public debt, expected payments to holders of guaranteed loans, and other amounts held pending payment to liquidate obligations. These accounts can be used to accelerate the recognition of payments in the cash-basis budget to when costs are incurred and become "sunk," rather than when paid. They are also used to explain the effect of changes in monetary assets on amounts borrowed from the public to finance a deficit. For more detail about the contents and use of this part of the

If employees' compensation were to be increased by raising the federal contribution to the TSP, cash outlays and the deficit would increase immediately.

- Federal employees also earn a defined-benefit pension based on their years of employment and average pay during their three highest-earning years. Federal employer agencies make actuarially-determined payments to Office of Personnel Management's (OPM) (i.e., "inside the government") retirement trust fund receipt accounts as these benefits are earned. In this case, the agency payment (outlay) to the trust fund is exactly offset within the budget by the receipt (negative outlay) in the OPM trust fund account. Balances are simply shifted from one budget account to another. The result is that this cost of current labor services has no net effect on current budget outlays or the current deficit. Rather, the cost appears much later when the employee retires and begins to receive pension payments. Thus, if legislation were to be considered today to increase the defined-benefit pension of today's employees, it would be recognized as having a net cost in the budget outlays only when today's employees are retired.
- Compensation for federal employees also includes a commitment that the government will pay a share of retirees' health insurance premiums. This benefit is earned by employees with years of service, but, unlike the defined-benefit pension, the employing agency makes no current-period payments to a retiree trust fund. Instead, this benefit is financed from future mandatory appropriations to OPM. Any legislated changes made today in the amount of this form of compensation would have no effect on budget outlays or the deficit until employees are retired.[11]

From both behavioral and managerial perspectives, the current budgetary treatment of deferred compensation for federal employees is deficient because only the immediate salary portion (which is paid out today) of the current cost of labor is salient to policymakers and the public because it affects current outlays and the deficit. The deferred share of labor costs (pensions and health benefits) appears to be "free" until the obligation is due to be liquidated. But at that point it is not feasible to control costs by reducing expected benefits because it would amount to a default on a solemn obligation. Moreover, a failure to honor obligations to retired seniors is inconsistent with deeply ingrained political and cultural values. Even if those commitments are technically not legally enforceable, they are politically enforceable.

Deficiencies in the current budgetary treatment of the cost of deferred compensation to federal employees is only a smaller example of the much larger problem of the budgetary treatment of the largest mandatory spending programs—Social Security and Medicare.[12] For reasons analogous to those affecting defined-benefit pensions, the costs of those programs that will become sunk in the current budget period are not readily visible to policymakers. Instead, costs appear as a claim on scarce resources only when they are due to be paid. Such an accounting treatment virtually assures that human decision makers with present bias will manage these commitments badly, if at all. Procrastination, in the hope that "something will turn up" is the most likely outcome as current political experience confirms.

The absence of budgetary recognition of some mandatory social insurance programs can be rationalized with the legal theory of legislative sovereignty: that a future Congress could change the law to reduce future benefits to whatever resources are available at that time. But because government *could* renege on past commitments does not mean that government must or should do so. The legitimacy of government and social stability could be put at risk by the failure to budget, plan for, and make good on the promises that beneficiaries have relied on in their own financial decisions and planning. By contrast, it

budget, see: https://www.whitehouse.gov/sites/default/files/omb/budget/fy2016/assets/budget.pdf .

[11] Most federal civilian employees also participate in Social Security and Medicare. They are subject to employment taxes and may qualify for benefits. As suggested here, the budgetary accounting for those programs suffers from many of the deficiencies associated with other deferred payment obligations. A full discussion of those programs, however, is beyond the scope of this paper.

[12] The failure of cash-basis accounting to measure costs at the time the government commits to them also applies to insurance payments for which the government has collected premiums in exchange for commitments to pay insured losses, conditional on specified future events.

would not be a default if Congress were to decide today to modify the total compensation for employees hired after today or to alter the benefits promised to future retirees while they are still decades from retirement.

To make information on the controllable costs of mandatory programs unavoidably visible to policymakers and to make timely corrective action easier, current measures should be replaced with a measure of costs that will become sunk in the current period. Such a measure could be obtained by "cashing out" those obligations as they accrue with payments from budget accounts to liability accounts in the budget's means of financing section.

*Tax Expenditure Example***.** The budgetary treatment of tax expenditures is another important instance of hidden budget information about program costs. Tax expenditures—special deductions, credits, exclusions, and preferences in the tax code intended to promote specific types of activity such as saving, investment, homeownership, or energy conservation—are large: over $1 trillion per year, or about 25 percent of federal outlays. They are also equivalent in resource allocation effects to levying and collecting a tax on all tax filers and then refunding the tax to taxpayers who engage in the favored activity. And they are virtually invisible in the budget.[13]

Tax expenditures currently appear in the budget as a reduction in tax revenues.[14] As a supplement to the basic information in the budget on revenues and expenditures, the Department of the Treasury and the staff of the Joint Committee on Taxation prepare and publish annual tabulations of tax expenditures by tax code provision. However, this disclosure of information is easy for budget framers to ignore as it is not separately identified in the calculation of the annual deficit. The lack of relevance of this information to the business of budgeting is re-enforced by the current practice of characterizing tax expenditures as tax cuts or more simply—"letting people keep their own money"—even though this retention is conditional on taxpayers acting consistently with policymakers' priorities. Because the budgetary effect of tax expenditures appears only on the revenue side of the budget, they are largely exempt from having to compete with cash spending programs. They are effectively taken off the budget table before any allocation decisions are made. This treatment of tax expenditures leads to excessive use of tax expenditures, inefficient allocative decisions, more total spending, and bigger deficits

In common with most mandatory spending, tax expenditures, once enacted, continue to direct scarce public fiscal resources to specific uses without further congressional action (unless they have expiration dates, like certain "tax extenders"). Indeed, legislative action must be taken to change the trajectory of either mandatory spending or tax expenditures. Nonetheless, program proponents may prefer tax expenditures to mandatory spending because, while mandatory spending appears in the budget only as past obligations are liquidated, tax expenditures only appear as a general, unallocated reduction in revenues.[15]

To increase the salience and transparency of the cost of tax expenditures in the budget and show that cost as equivalent to equal dollars of cash spending, tax expenditures should be shown in the budget consistently with the treatment of other forms of spending. We detail how this might be effected in the section below.

3. <u>Benefits.</u> Another informational shortcoming of the current budget process is the limited use of information on benefits, or value for money, associated with federal spending. The Congressional Budget Act did not include an explicit provision for the use of program performance or evaluation information in budget decisions. The silence of the Budget Act on this matter has been filled partially over time by the various efforts of the Office of Management and Budget, the Government Accountability Office (GAO), CBO, academic and policy research groups, and executive agencies—supported by the enactment of the Government Performance and Results Act (GPRA) of 1993 and the GPRA Modernization Act of 2010.[16] As a whole, these

[13] Burman, Leonard E. and Marvin Phaup. 2012.

[14] An important exception is the earned income tax credit which is refundable for amounts in excess of taxes due. Amounts in excess of taxes due are refunded to taxpayers and are shown in the budget as federal outlays.

[15] The late economist, David Bradford, once facetiously proposed a novel way to sharply reduce the size of the federal budget without cutting services or constituent benefits. He called it the Weapons Supply Tax Credit. Under his plan, the Department of Defense would purchase military hardware and ordnance with tax credits rather than cash. Budget revenues and outlays would decline by equal amounts, but this accounting change would leave the defense budget and total use of resources by government unchanged.

[16] One of the latest legislative efforts is P.L. 114-140. See: https://www.congress.gov/bill/114th-congress/house-bill/1831 .

efforts have increased somewhat the availability, but not necessarily the usage, of information about the performance of many agencies, programs, and policies. GAO notes that part of the problem may be that decision makers do not have an inclination or the expertise to use the information.[17] Our proposal is intended to provide an external expectation of budget participants that this information is to be used in making decisions at every stage in the budget process.

Five Behaviorally-Informed Budget Process Changes

We propose several process modifications that behavioral research suggests could improve budget decisions by reducing the demands on scarce human cognition and mental energy. These changes are intended to increase the accessibility and salience of information that is critical to effective budgeting and to add procedural safeguards against the enactment of fiscally irresponsible legislation. They are meant to be illustrative of the types of behaviorally motivated change that could facilitate better budget decisions. Our proposals would:

1. Integrate information on the long-term fiscal constraint into the budget process;
2. Replace cash-basis accounting for major mandatory programs in the budget with "up-front, full cost" measures produced by cashing out costs as they accrue, with corrective transfers based on annual re-estimates;
3. Treat tax expenditures as equivalent to cash spending;
4. Create an expectation that information on performance as well as cost will be used in all budget decisions;
5. Delay the enactment of legislation that would significantly worsen the fiscal condition of the government.

1. <u>Add a Long-Term Constraint.</u> The iron law of economics and budgeting is that nothing is free. Every benefit conferred by government must be paid for by someone, somewhere, sometime. But the electorate has limits on its willingness to pay, and borrowing is neither an unlimited nor permanent nor free source of funding for government, because lenders expect to be repaid with interest. The absence of a salient, long-term constraint from the budget process encourages present bias and lawmaker behavior that favors an emphasis on the short term.

One way of introducing a long-term budget constraint is to estimate and include in the budget the present value of projected tax revenues to be collected under current law over the long term. It is natural, having calculated the present value of revenues, to do the same for spending and to compare the two. The resulting size and sign of the difference indicates either the shortfall or excess of revenues relative to spending over the planning period. The fiscal gap, which is already periodically reported by CBO and is required information in the annual Financial Report of the United States Government prepared by the Department of the Treasury, provides such a measure, conveniently expressed as a percent of GDP.[18] Moreover, because the fiscal gap replaces multiple annual future cash flows with a single equivalent present value, it contributes to the desired effect of bringing the future closer to the present for policymakers and the public.[19]

Our proposal is to require prominent inclusion of a target path for such a metric in the President's budget and the congressional budget resolution. This would focus the attention of lawmakers and the public on limits at the beginning of the annual budget process. The chosen path should be justified as a means of avoiding future "losses," or unplanned reductions in benefits and increases in taxes, for constituents. Better yet would be to enact the target path for the fiscal gap into law, thereby requiring formal "sign off" by both the President and Congress.

An explicit target path for the reduction of the fiscal gap would enable policymakers, the public, and CBO to monitor more easily the fiscal performance of government. It would also integrate future fiscal conditions with current short-term decisions. CBO should be assigned the task of issuing frequent scorekeeping reports on legislative progress toward the target path. Economic, defense, or other emergencies could be addressed by amending the target path for

[17] See: http://www.gao.gov/assets/670/666187.pdf .

[18] FASAB.2009; Bhatti, Imtiaz and Marvin Phaup. 2013.

[19] Another, less precise, indicator of the budget constraint is the projected path of the ratio of government debt to GDP. Projections based on current law and policy that show a trajectory with debt rising faster than national income is an indication that the government is violating its effective budget constraint and that policy change is required.

temporary departures in a visible and deliberate way, but with full future offsets enacted as a part of the amending process.

2. Cash Out the Cost of Mandatory Spending as it Accrues.

Our proposal is to adopt accrual budgetary accounting with annual re-estimates for deferred-payment programs. The objective is to recognize full costs in budget outlays and the deficit at the last point of effective control, without defaulting on program commitments. The key element in our earlier illustrative proposal for deferred pension benefits would be to treat the actuarially-determined employer agency payments to the retirement trust fund as net budget outlays (i.e., not offset to zero). This change would treat the cost of all present and deferred compensation as a current period outlay. Similar forms of deferred mandatory spending would be treated analogously, each with its own budget outlay account and a liability account in the means of financing section of the budget. Liability accounts would hold sufficient assets to liquidate all accrued obligations when due. Liability account balances would be maintained by periodic re-estimates and adjusting cash flows either to or from the budget account.

3. Increase the Salience of the Cost of Tax Expenditures

We propose, as have others, to treat tax expenditures in the budget as equivalent to spending and taxes.[20] This can be accomplished by adding a new form of revenues and outlays to the budget: tax expenditure revenues and tax expenditure outlays. By applying this labeling to existing tax expenditures, both revenues and spending, but not the deficit, would increase by the same amount. As a result, the revised budget presentation would report correctly that the government's allocative role in the economy is about $1 trillion larger than reported under current practice. New tax expenditures, however, would be shown in the budget as an increase in tax expenditure outlays and the deficit. This treatment would make clear that enacting new tax expenditures would increase spending instead of cutting taxes. It would also diminish the budgetary and behavioral bias in favor of tax expenditures.

4. Increase the Use of Performance Information in Decisions

We aim to create an expectation that policymakers will give equal consideration to performance and cost information at every stage of the budget process. Summary results of relevant, credible, external research should be routinely included in the President's budget, in the views and estimates letters from other committees to the budget committees, and as addenda to CBO cost estimates. One way to encourage this result is by simply changing the titles of those documents to include "costs and expected results." Since every "cost" represents a decision to allocate resources to achieve some purpose, policymakers will have some basis for deciding whether they are getting commensurate value with each resource allocation decision they make.

5. Create Legislative Speed Bumps to Slow Fiscal Errors

Sometimes, when the political stars are aligned appropriately, members on one or both sides of the political divide will take an action that is simply irresponsible, i.e., benefits are provided without any provision for financing the cost, other than increased borrowing and debt.[21] In such situations, behavioral studies suggest that the creation of a procedural obstacle to delay the decision can induce us to pause and give our slower, more reflective selves an opportunity to reconsider. As an example, we propose a new point of order against budget resolutions that would increase the fiscal gap. With this change, 60 votes would be required in the Senate to pass a budget resolution that violated this rule.

Conclusion

One encouraging result of our analysis is that we find substantial overlap between the budget process reform measures proposed here, based on behavioral research, and those advanced by others for quite different reasons. For example, adopting accrual budgetary accounting for major mandatory programs is a necessary step toward capping increases in this spending without reneging on past promises or fundamentally changing the nature of the program. And, as proposed by others, setting targets for debt reduction as a share of GDP in the budget resolution and the President's budget is complementary to our proposal for incorporating a long-term budget constraint explicitly into the

[20] Burman, Leonard E. and Marvin Phaup. 2012.

[21] Hearn, James J. and Marvin Phaup. 2016. Appendix 2 discusses three instances.

budget process. Enacting a re-vitalized and comprehensive PAYGO rule[22] would have similar effects to establishing new points of order against resolutions that would worsen fiscal imbalance.

More generally, we conclude that many of the reform proposals, currently under discussion by Congress and others who monitor the federal budget process, are consistent with the lessons of behavioral research and the goal of making more responsible budget decisions easier and more frequent.

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[22] Hearn, James J. and Marvin Phaup. 2016.

References

Bhatti, Imtiaz and Marvin Phaup (2015). "Budgeting for Uncertainty and Bias: A Federal Process Reform Proposal," Public Budgeting & Finance, 35, 2 (Summer 2015), 89-105.

Bhatti, Imtiaz and Marvin Phaup (2013). "A Case for Adding a Long-Term Budget Constraint to the Congressional Budget Process," Albany Government Law Review, 6 (1): 110-145.

Burman, Leonard E. and Marvin Phaup (2012). "Tax Expenditures, the Size and Efficiency of Government, and Implications for Budget Reform," Tax Policy and the Economy, 26, Jeffrey R. Brown (ed.), National Bureau of Economic Research, University of Chicago Press, 93 – 124.

Burman, Leonard E., Jeffrey Rohaly, Joseph Rosenberg, and Katherine C. Lim (2010). "Catastrophic Budget Failure," National Tax Journal (September), 63(3), 561-584.

Cohen, Geoffrey (2003). "Party over Policy: The Dominating Effect of Group Influence on Political Beliefs," Journal of Personality and Social Psychology, 85, 5 (November), 808-822. https://ed.stanford.edu/sites/default/files/party_over_policy.pdf

Coronado, Julie, Olivia Mitchell, Steven Sharpe, and Blake Nesbitt (2008). "Footnotes Are Not Enough: The Impact of Pension Accounting on Stock Values," *Journal of Pension Economics and Finance*, Cambridge University Press, 7, 3 (November) 257-276.

Elmendorf, Douglas and Louise Sheiner (2016). "Federal Budget Policy with an Aging Population and Persistently Low Interest Rates," Hutchins Center, Brookings Institution, Washington, DC. http://www.brookings.edu/~/media/Research/Files/Papers/2016/02/03-hutchins-working-paper/WP18-Elmendorf-Sheiner_Final.pdf?la=en

Federal Accounting Standards Advisory Board (2009). "Reporting Comprehensive Long-Term Fiscal Projections for the U.S. Government," Statement of Federal Financial Accounting Standards 36, Washington, DC. http://www.fasab.gov/pdffiles/sffas_36_.pdf

Hearn, James J. and Marvin Phaup (2016). "Federal Budget Reform: A Behaviorally Informed Approach," Working Paper #4 in the George Mason University Series for the National Budgeting Roundtable. http://www.budgetingroundtable.com/new-page-1/

Kahneman, Daniel (2011). Thinking, Fast and Slow. Farrar, Straus and Giroux, New York.

Minarik, Joe (2011). "What Would a Genuine Fiscal Crisis Look Like?" Huffington Post.com, January 27, 2011.http://www.huffingtonpost.com/joe-minarik/what-would-a-genuine-budg_b_814418.html

Posner, Paul, Steve Redburn, Phil Joyce, and Roy Meyers (2012). "Strengthening the Federal Budget Process," Memos to National Leaders, National Academy of Public Administration and The American Society for Public Administration. http://www.memostoleaders.org/sites/default/files/RevisedBudgetFinal.pdf

Rivlin, Alice M. and Pete Domenici, (2015). "Proposals for Improving the Congressional Budget Process," Bipartisan Policy Center, Washington, DC. http://bipartisanpolicy.org/library/proposal-for-improving-the-congressional-budget-process/

Sunstein, Cass R. (2013). *Simpler: The Future of Government*, Simon & Schuster Paperbacks, New York.

Sunstein, Cass R. and Reid Hastie (2015). *Wiser: Getting Beyond Groupthink to Make Groups Smarter*, Harvard Business Review Press, Boston.

Thaler, Richard H. and Cass Sunstein (2008). *Nudge: Improving Decisions about Health, Wealth, and*

Happiness, Penguin Books, New York.