

CBO TESTIMONY

Statement of
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Congressional Budget Office

on
Capital Budgeting

before the
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NOTICE

This statement is not available for public release until it is delivered at 11:00 a.m. (EDT) on Friday, April 24, 1998.



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Ms. Brown, Mr. Corzine, and Commission members, I am pleased to meet with you today to present the views of the Congressional Budget Office on capital budgeting. My statement makes two points.

First, we must retain the budgetary practice of recognizing the full cost of a decision to acquire an asset—no matter how long its expected useful life—when that decision is made. The up-front, full-cost basis of accounting for capital acquisition at the governmentwide level is conceptually sound, consistent with common practice and economic efficiency, and necessary for budget discipline.

Second, we can improve both the budget account structure and the budget process by attributing all the costs of acquiring and holding capital to the particular programs that use the assets. Doing so would facilitate the management of capital resources and support the objectives of the Government Performance and Results Act (GPRA). Such a recognition by users of the period-by-period cost of capital parallels recent budgetary innovations abroad.

RETAIN UP-FRONT, FULL-COST BUDGETING FOR CAPITAL

Critics of the federal budget's up-front treatment of capital spending claim that current practice is biased against long-lived assets and that, as a consequence, the

U.S. government is underinvesting. Our judgment is to the contrary: current budgetary accounting does not distort the information decisionmakers use when they weigh the acquisition of capital goods, and there is no systematic evidence of too little public investment.

Critics argue that the federal government is the only institution in the world that "expenses" the acquisition of capital assets. That argument is artful but wrong. It exploits a common confusion between financial and budgetary accounting by contrasting the financial accounting practice of recognizing depreciation with the budgetary practice of recognizing full cost. In fact, the federal government is not unique in recognizing full cost in making decisions to acquire assets. The cost of obtaining a capital good—the value sacrificed—is its purchase price. Private firms, nonprofit institutions, and state and local governments all weigh expected benefits against full cost in capital budgeting.

Full Cost Is the Correct Measure for Budgeting

Financial and budgetary accounting are branches of the same discipline, but they have fundamentally different purposes. Financial accounting looks backward in time: it summarizes economic performance for a past period. Budgetary accounting,

by contrast, looks forward: it measures the cost of planned acquisitions and the use of economic resources in the future.

To gauge financial performance, income and expenses must be recognized in the period in which they occur rather than in the period in which cash was received or paid. For example, a payment received today may be for work performed last year. To measure performance accurately, both the income and expense have to be assigned to the period in which they were incurred. In attributing income and expense to those periods, it would make little sense to recognize the full cost of an asset as an expense in the period in which it was purchased, because its useful life will span many periods. Accordingly, financial accounting uses a variety of methods to allocate revenues and costs—including the consumption of long-lived assets, or depreciation—to specified periods. That use of depreciation in financial accounting illustrates the general principle that the correctness of any feature of an accounting system depends on its intended purpose.

Budgetary accounting measures the cost of the economic resources the government will use. Those measures are critically important because every dollar of resources preempted by the federal government is at least a dollar no longer available for other uses.

The cost of any government decision to use productive resources is the full value of the alternatives that must be sacrificed to undertake the chosen action. As noted in Greg Thibadoux's "Capital Budgeting," which was distributed to the Commission, that cost is especially relevant to government-funded capital because many decisions to acquire capital are irreversible.¹ Often there is no ready market for a federally owned asset. Even when government can dispose of a long-lived asset, the amount realized often falls short of the value of the resources committed to the project. Consequently, the appropriate time to recognize a capital expenditure in the budget is when the decision to use resources becomes irreversible.

Although budget decisions involve both costs and benefits, only costs are tallied in the budget. That focus on costs is appropriate because the perceived benefits of many government actions vary with one's political values and therefore are difficult to measure objectively.

The anticipated useful life of an asset is crucial to a decision to acquire it, but that is because of the implications for benefits, not costs. A long life increases the expected flow of benefits, but acquisition cost is unaffected by the expected life of an asset. A \$100 million dam costs \$100 million whether it lasts five years or 50 years, but total benefits and the likelihood of gain from the project increase

1. See Nicholas Apostolou and Larry Crumbley, eds., *Handbook of Governmental Accounting and Finance* (New York: Wiley & Sons, 1988), Chapter 14.

significantly with expected life. If the federal budget exhibited a bias against capital spending, it would be logical to look for the source and possible correction for that bias in the way policymakers assign benefits—not costs—to capital.

Full-cost, up-front recognition of costs is the appropriate basis of accounting for all decisions that irreversibly divert valuable resources to the objectives of government or any other entity, including private firms. Current federal budgetary practice is appropriate because it is consistent with the nature of the decision and supports the intended use of the information.

No Evidence of Bias in Full Costing

There is no evidence to support the claim that the federal government generally underspends for long-lived assets. With current budget accounting, there have been many episodes of rapidly expanding public investment: the construction of the Interstate highway system; the U.S. space exploration program, culminating in the landing on the moon; and the large defense buildup in the 1980s. In each case, the critical element appears to have been strong political support for the investment.

An across-the-board bias against capital spending would result in widespread underinvestment and high rates of return on new federal projects. Although

measuring the flow of benefits from public investment is extraordinarily difficult, recent attempts to do so for federal investments have found mixed results. A forthcoming CBO paper, *Federal Investments and Economic Growth*, finds that although some individual projects have high rates of return, such projects are limited in supply. There is no compelling evidence that increases in federal infrastructure spending would have any perceptible impact on economic growth.

That result is hardly surprising. Federal capital spending often substitutes for investments by state and local governments for such purposes as highways and transportation. Federal spending for human capital also displaces private, as well as state and local, spending for education and training. In some instances, the potential availability of federal spending may even lead to less capital spending than would otherwise occur. For example, state and local governments may delay action for needed repairs and maintenance of highways in the hope that federal funding will be made available. Moreover, in a decisionmaking environment in which politics almost always dominates benefit-cost analysis, one should not expect that government investment will be directed toward the most productive projects. By contrast, private investment is subject to market discipline, which provides strong incentives to invest in projects with high expected returns. Private investment, unlike government investment, is subject to severe penalties for failure.

Use of Depreciation Could Introduce Bias and Weaken Budget Discipline

The defining characteristic of capital is its ability to provide benefits over an extended period of time, whereas consumption is defined by its immediate gratification of wants. Although investment and consumption expenditures are often contrasted on that basis, the distinction is a forced one in practice. Most government purchases produce a flow of benefits over time. For example, future benefits flow not only from structures, roads, and bridges but also from many forms of education and training, research, health care that enhances and extends life, child nutrition that increases the ability of children to learn and mature, and public safety that fosters investment in housing and other forms of private capital. Indeed, the work of commissions such as this one is likely to contribute to the nation's overall economic health in the future.

The long-lived effects of most public expenditure create difficulties for any proposal that would lower the budgetary bar for capital spending. The first of those difficulties arises in trying to specify a workable definition of capital spending. Suppose, for example, that the budget adopted as its definition of capital the Federal Accounting Standards Advisory Board's concept of depreciable assets. That category, some \$19.7 billion out of a total budget of \$1.6 trillion in 1997, consists largely of federally owned property, plant, and equipment, exclusive of military weapon systems. To use such a narrow definition would not eliminate bias; rather,

it would introduce a different bias—against spending that does not result in government-owned depreciable assets. Its use would also lead to pressure for a more inclusive definition of capital spending.

Adopting a broad, conceptually based definition, however, would invite the charge that capital budgeting is merely a device for understating the cost of most federal spending. And, indeed, changing the budgetary cost of an expenditure from total cost to estimated depreciation would weaken efforts to discipline the federal draw on private resources.

The threat to budgetary control from adding an ambiguous budgetary category, labeled capital, increases with the need to measure depreciation for the various forms of federal capital expenditure. Depreciation schedules cannot avoid being arbitrary. Examples abound of investments with significant residual value after complete depreciation, and of others that have a positive book value but have become worthless because of technological or economic change. Substituting annual depreciation for full acquisition cost in the budget, therefore, would displace an objective measure with a subjective one, whose imprecise character would make it a convenient target for manipulation and distortion.

IMPROVE CAPITAL BUDGETING BY ATTRIBUTING COSTS TO PROGRAMS

The federal government's use of capital might be improved by attributing the cost of capital to the programs that use the assets. That is, if the user pays, the government is more likely to acquire only those capital items whose benefits are worth the cost. The government would also be more likely to use those assets efficiently and to dispose of them when they are no longer appropriate to its needs.

Under current practice, acquisition costs are frequently paid for by an account other than that of the user, and the holding costs of capital are almost never recognized. Purchases are often paid for by a funding source outside the program, such as a central capital account, an agency other than the user, or even a different level of government. And once an asset is acquired, neither the decline in its value from aging and use nor the interest on the public debt that could be retired if the asset was sold is recognized as a cost of the decision to retain and use that asset. In fact, the costs of acquiring and holding capital are reflected in the operating costs of the using entity only in the unusual case in which the asset is purchased by the program agency with funds borrowed from the Treasury.

Simply requiring program users to pay the acquisition cost would attribute costs in a way consistent with accountability and efficiency, but it would also create

spikes in the operating budgets of many small programs, and unless those purchases were financed with borrowing from the Treasury, it would not address the objective of recognizing the holding cost of capital.

Large, well-run firms routinely evaluate their operating components by comparing revenues with costs if those costs include charges for both the consumption of capital and alternative uses of the firm's resources. Many national governments, including the United Kingdom, New Zealand, and the Netherlands, are following that example by recognizing those capital costs in the operating budgets of the agencies that make use of assets in carrying out their mission. Both the U.K. and the Dutch governments are moving to charge the cost of capital to users while retaining the recognition of full, up-front acquisition costs in the budget aggregates.

The Dutch Ministry of Finance explains that approach: "[E]fficiency and effectiveness can be improved by making visible the products (outputs) delivered by a government service as well as the related cost."² An accrual system that recognizes both depreciation and capital costs in agency budgets is better suited to that task than the cash- or obligations-based approach. A related benefit is to encourage "sound management for the existing stock of capital goods of central government, since the associated costs would be visible in the budget." By that method, "the organization

2. Harman Korte, Director of Budget Affairs, Ministry of Finance, "Accrual Accounting and Budgeting in the Dutch Government" (presented at a meeting of senior budget officials, Organization for Economic Cooperation and Development, Paris, June 10-11, 1997), pp. 9-10.

is constantly forced to consider whether a capital good should be retained or sold." The Dutch statement also notes that limited change "need not damage the unity of the budget."

One way of adapting that practice to the U.S. government is through the use of capital acquisition funds (CAFs), which have been described to the Commission by staff of the Office of Management and Budget.³ With CAFs, the costs of holding and using capital would be more fully incorporated into agency budgets—and decisions—if all capital was purchased by accounts financed with borrowing from the Treasury. Those accounts would then collect rental payments from users of the assets sufficient to repay interest and principal to the Treasury. Through those intragovernmental payments, agency and program operating costs would fully reflect the cost of holding and consuming capital assets in each budget period.

Making operating costs more inclusive can have beneficial consequences for policy and program efficiency. Consider, for example, the Bureau of Engraving and Printing (BEP), a part of the Department of the Treasury. BEP designs and manufactures currency, postage stamps, and various government securities. Since 1950, BEP has been required by law to finance its operations by charging its customers—the Postal Service, the Federal Reserve, and the Treasury—prices

3. Office of Management and Budget, "Charging Programs for the Full Cost of Using Capital" (briefing, January 31, 1998).

sufficient to cover all direct and indirect costs, including administrative expenses and, since 1977, its capital investments.

However, the law does not provide for the inclusion of all capital costs in BEP's operating costs—some are omitted. Under current law, BEP pays no rental charge, and therefore recognizes no expense, for its use of land and buildings, including the facilities in Washington, D.C., and Fort Worth, Texas. In addition, BEP finances its capital with federal funds rather than debt, for which it pays no interest. A crude, but probably conservative, estimate is that BEP's operating costs are understated annually by \$38 million, or about 8 percent, by omitting some \$3 million for rent and \$35 million for debt service.

Increasing BEP's prices to cover those costs could have several consequences. It would probably accelerate BEP's loss of market share for manufacturing postage stamps, an area in which private producers can compete without benefit of government subsidies. It would increase pressure on BEP to reduce costs, perhaps by shifting more production to the newer Fort Worth facility, or by disposing of some older assets and investing in more efficient plant and equipment. More generally, it could prompt rethinking of the U.S. practice of maintaining a monopoly in currency production. Efficiency in manufacturing currency might be increased by opening the market to competition.

Although CAFs could be useful, they are a conceptual proposal rather than a detailed plan. Thorny practical issues remain to be addressed before their potential can be fully realized. For example, how can the uncertain useful life of an asset be matched with the specific maturity of debt to the Treasury that is used to finance the purchase? Once debt is retired, will program agencies be able to use assets without charge? How will CAFs' debt be retired if the program using an asset decides that it is no longer worth its cost? More work needs to be done to convert this idea into a functional plan.

CONCLUSIONS

Recognizing the total cost of a capital acquisition up front is a valuable principle for budgeting. The current budget aggregates have it right and should not be changed. Indeed, budgeting can be improved not by moving away from full-cost recognition but by improving cost measurement throughout the budget so that information is available to support decisions at the program level as well as in the budget aggregates.

The dual treatment of capital costs—full, up-front recognition in the budget totals at acquisition and amortized inclusion in agency operating costs—supports both budget control and the results-oriented program-management objectives of the

GPRAs. It is also consistent with budgetary innovations in New Zealand, the United Kingdom, and the Netherlands.

I have not explicitly addressed the full range of options that the Commission may consider to reduce the budget hurdles faced by public investment, but without a showing of underinvestment by the federal government, I doubt that any of those would be advisable.