CBO TESTIMONY

Statement of
Robert W. Hartman
Assistant Director
Special Studies Division
Congressional Budget Office

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NOTICE

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CONGRESSIONAL BUDGET OFFICE
SECOND AND D STREETS, S.W.
WASHINGTON, D.C. 20515

Mr. Chairman and Members of the Subcommittee, I appreciate this opportunity to discuss the potential benefits of and problems with adopting a federal capital budget.

My statement today focuses on three points:

- The current measure of the budget deficit does not accurately reflect the budget's contribution to future economic output and productivity. It fails to do so, in part, because it does not distinguish between investment and operating spending. Federal investment potentially adds to future output, while operating expenditures do not. Under a capital budget, the operating account's surplus or deficit would be geared to determining the federal budget's effect on national saving. The capital account deficit would determine how investment is divided between the federal and nonfederal sectors.

- For capital budgeting to improve decisionmaking, it must overcome significant obstacles such as measuring the useful lives of assets, determining what spending constitutes investment, charging depreciation to the operating account, and establishing control mechanisms over investment spending.

- Establishing a capital budget imposes a significant risk of increasing government consumption by reducing budget discipline and encouraging the reclassification of operating expenditures as investment. At the present time, these risks outweigh potential benefits. When the budget is near to being balanced, the risks and benefits of a capital budget should be reevaluated. In the interim, some major problems of defining investment and estimating depreciation should receive greater attention.

SHORTCOMINGS OF THE CURRENT MEASURE OF THE DEFICIT

Existing budget concepts are intended to produce an inclusive measure of the deficit, show the government's borrowing needs, and help determine the deficit's effect on aggregate demand. This measure helps policymakers determine and plan for the degree of demand stimulus or restraint that federal spending and taxing has on the economy.

Many analysts believe that the principal macroeconomic use of the federal budget has shifted, however, from stabilizing the economy to spurring economic growth; from managing aggregate demand in the short run to enhancing economic capacity in the long run. Critics of the present practice argue that the current measure of the budget deficit, while useful in assessing

the government's effect on aggregate demand, provides misleading information for achieving the objective of long-term growth.

Viewed from a growth perspective, federal borrowing to finance public consumption reduces the economy's future potential output. Such borrowing reduces productive private investment. By contrast, federal borrowing to build a road or other investment may not reduce potential output at all. Although borrowing for federal investment may displace productive private investment, the new road adds to the nation's capital stock. If federal spending were shifted in equal amounts from public consumption to productive public investment, future economic output would be increased even though the current measure of the deficit would be unchanged.

To reflect the government's effect on future output more accurately, therefore, some analysts argue that the budget deficit should measure investment separately from federal expenditures that support current consumption. To calculate such a deficit, the budget would record all spending on consumption plus the portion of the federal capital stock consumed--or depreciated--in a year in one account ("the operating account") and the full purchase price of investment in a separate account ("the capital account"). Assuming all revenues are credited to the operating account, the operating deficit would measure government borrowing for consumption.

Adopting a capital budget--one that replaces gross investment in federal outlays with a measure of the annual consumption of investment goods--would not inhibit the government's objective of stabilizing the economy. All information currently available to macroeconomic policymakers would continue to be available. But adopting a capital budget would imply an intention to increase the emphasis given to the federal government's role in affecting long-term growth.

ECONOMIC RATIONALE FOR A CAPITAL BUDGET

If the budget were divided into operating and capital components, different financing norms could be applied to each to fulfill distinct economic objectives. The operating deficit or surplus would determine the federal government's contribution to national saving. Under a balanced operating budget, current taxpayers would pay for all spending that provides current benefits. Federal saving would be zero; national saving would equal private saving. If private saving is believed to be inadequate, the Congress could plan for a surplus in the operating budget. In that case, government saving would supplement private saving.

Alternatively, if the private sector oversaved, a planned deficit might be warranted. Current taxpayers would not pay for all of the services they

receive, in effect passing part of the cost on to future generations in the form of an increased tax burden. Unlike federal borrowing to finance current benefits, borrowing to pay for productive federal investment compensates future taxpayers by providing them with an asset.

Debate about capital spending would address a different issue: what share of savings would produce higher social returns if invested by the federal government instead of by the private sector and state and local governments? Such an approach would call for direct comparisons between the rates of return on federal investment and those on nonfederal investment.

The Congressional Budget Office's review of the empirical evidence suggests that little empirical support exists for claims that across-the-board increases in certain categories of public spending would yield rates of return that are greater, on average, than the return to private-sector investment. Despite this caveat, carefully selected public investments can clearly yield high returns.[1] Moreover, prospective--not historical--returns from public investment should guide decisionmaking.

A capital budget could change the way the Congress considers two significant and contentious public policy issues. First, the Congress would

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1. Congressional Budget Office, *How Federal Spending for Infrastructure and Other Public Investments Affects the Economy* (July 1991).

choose the relationship between output now and in the future by setting the operating-budget target that affects the size of savings available for investment. Second, it would focus on the degree to which the federal government draws from the saving pool (and thus from private investment) to finance its investment projects. Currently, these two distinct decisions must not only be made simultaneously, but they are made implicitly because the budget does not distinguish between consumption and investment in a manner that allows separating the decision.

Rationales other than measuring and planning federal impacts on national saving have been offered for a capital budget. For example, some supporters of capital budgeting claim that because private businesses, states, and foreign governments prepare capital budgets, the concept could be useful to the federal government. However, capital budgets used by these nonfederal entities are different in substance and form from the capital budgeting plans proposed for the federal government. For example, in private-sector accounting, depreciation helps establish a firm's profitability and net worth. But these concepts make little sense for the federal government. Moreover, state capital budgets often have far more restrictive coverage than that proposed under a federal capital budget. Finally, to our knowledge only two developed countries, Chile and New Zealand, recognize depreciation in their budgets.

THE PROBLEMS OF A CAPITAL BUDGET

Implementing a capital budget poses a number of hazards. These hazards arise because of the difficulties of defining federal investment and depreciation and because of uncertainty about the ability of the budget process to limit consumption and capital spending. Although the potential advantages of a capital budget could possibly outweigh those hazards in a different fiscal climate, adopting a capital budget now would distract from the more important task of reducing the federal drain on national saving.

Defining Investment and Depreciation

A capital budget would require all federal spending to be divided between "consumption" and "investment" and would necessitate calculating depreciation of various components of federal capital. However, whether this distinction and actual depreciation rates can be specified in a nonarbitrary manner is not clear. These difficulties take on significance because of the incentives created by a capital budget and the political process to define virtually all spending as investment and to understate depreciation rates. It might also be difficult to ensure that these definitions could be maintained over time, which would be necessary for capital budgeting to be workable.

What Is Investment? In concept, the distinction between investment and non-investment spending is clear. Expenditures for current operating spending provide economic benefits now; investment enhances opportunities for consumption in the future. Thus, entitlement programs that increase current income and payments to stabilize the income of particular groups, as well as net interest, would be classified as operating spending. Moreover, spending to operate the executive, legislative, and judicial branches, as well as law enforcement, clearly fall into the operating accounts.

In contrast, federally funded programs that yield future benefits would be classified as investment. This category includes spending (including grants to states and localities) in areas such as (1) physical infrastructure, for example wastewater treatment facilities and transportation, (2) research and development and (3) human capital--like education and training--that can increase productive capacity.

Many difficult cases arise, however, because some federal expenditures do not fall clearly into investment or operating categories. Defense procurement and health care are the two most important of these. Major defense systems last into the future, and on that ground would seem to be investments, but their connection to increasing the capacity for private

production in the future is not clear, and on that ground some would count such costs as operating expenditures. A federal capital budget that included both investment in human capital (other than health care) and defense investment would be roughly double the size of a capital budget that included human capital but excluded defense investment.

Federal spending that makes people healthier often makes them more productive, which would argue in favor of counting spending on health care as investment. But a large portion of all health care spending goes to those who are not in the work force or are not productive because of age or disability. Thus, all spending for health care cannot be said to increase productivity, even though it does provide benefits to the person, or the family of the person, receiving the health care. Moreover, including health care payments as investment may set policymakers on a slippery slope, with almost any type of spending being classified as investment. For example, if Medicare is an investment, why not also include food stamps on the grounds that a well-fed work force is more productive?

Other difficult cases exist. For example, although most transfer payments to individuals should be considered operating expenses, assistance to students may be classified as an investment in human capital. However, because of their relatively small size, the classification of these programs has

more limited effects on measuring consumption or capital spending than classifying defense and health spending.

A capital budget fully consistent with the rationale offered for it would assign weights to various types of spending in proportion to their contribution to productive potential. Such an elaborate division of a dollar of spending into an investment component and an operating component might collapse under the weight of its administrative burden. Consequently, the crucial classification of spending must be made using simple, reasonable, or--if necessary--arbitrary rules.

Because the operating budget would not include current capital spending, supporters of particular spending programs have a strong incentive to have their program defined as investment. Given this incentive, the arbitrary nature of this classification could pose a significant risk that the process would be abused to include almost all spending as investment. For example, some Members of Congress have pointed to President Clinton's expansive use of the term investment in his economic program as evidence of this phenomenon.

Moreover, if no accepted definition of investment exists, it will be extremely difficult to ensure that the scope of the term does not repeatedly expand or contract based on evanescent coalitions built by supporters or

opponents of particular spending programs. These dangers, however, could be mitigated if depreciation charges in the operating budget led to new taxes or spending cuts.

Depreciation Not Known. Charges for depreciation should provide a reasonable allocation of the cost of an investment over its useful life. Ideally, these depreciation charges should be determined on a case-by-case basis. However, for budget planning purposes, depreciating every single capital good over its lifetime is unworkable because of the number and type of investments the federal government makes. Rates of depreciation of investments in such intangibles as education, training, and research and development would be especially problematic. Even some proponents of capital budgeting agree that we do not know how to measure some forms of depreciation with any reasonable degree of accuracy, and that attempting to monitor and record the true rate of depreciation of all assets would be impractical at the level where broad budgetary allocations are made.

Advocates of capital budgeting respond that either an expert body or the Congress through law could establish depreciation schedules. Such schedules may not, however, live up to the desire to make charges for depreciation an accurate reflection of the "true" annual cost of long-lived assets, whose inclusion in the budget would provide decisionmakers with new, relevant, and

useful information. In any event, if depreciation charges are made in constant dollar terms and are applied consistently over recent budgetary history, differences in the assumed useful lives of assets have a relatively small effect on annual depreciation.

According to the critics of capital budgeting, if such "new" information is the result of somewhat arbitrary estimates, taking the estimates seriously would be hard. Fully resolving these conflicting views might require establishing simple depreciation rules for "macro" decisions and more complex rules for agency (and "micro" budget) decisionmaking, much like the definitions governing spend-out rates under current budgetary procedures. Making these consistent will not be an easy task.

Capital budget supporters argue that examples of bona fide depreciation schedules already exist. The Internal Revenue Code currently provides depreciation schedules for the full panoply of private investments. In addition, the Office of Management and Budget has made estimates of depreciation for federally financed investment. Federal programs such as the Tennessee Valley Authority, various power authorities, and the Department of Defense support services currently estimate depreciation and include this as a cost for their priced services. In these cases, the explicit objective is to measure accurately the cost of current services provided and to affect

programmatic decisionmaking. However, the quality of these estimates varies, and they have no direct effect on the deficit.

Depreciation forces another contentious decision: how to treat investments made before a capital budget is enacted. In a capital budget, annual depreciation measures the effect that time and use have on the productivity of federal capital stock. Some argue that the costs of capital acquired before a capital budget is established were recognized in the budget when the capital was purchased. To depreciate these old goods now, they claim, would double-count their cost. However, this position would grossly understate capital use, would misinform the Congress, and might appear designed to keep reported spending artificially low.

If depreciation for a federal capital budget were to be set arbitrarily, opportunities would arise to misuse the process to reduce the up-front cost of investment spending. Supporters of spending would have incentives to exaggerate the useful life of investment to reduce the near-term budgetary charge for depreciation. If the rules governing depreciation schedules were not well established and adhered to, a capital budget could easily become a source of budget gimmickry.

Limits on Budget Discipline

The federal government has fewer external constraints on its ability to spend and borrow than do other economic entities. Unlike others, its ability to borrow is not constrained by lenders' assessments of ability to repay. The federal government--with the sovereign power to tax and create money--faces little discipline from lenders, who are assured of being repaid independent of the productivity of the government's investment. The restraint that does exist is almost entirely internal and must be self-imposed.

The existing budget process is a crucial element in the government's self-imposed limits. One of its key concepts is that the total cost of federal spending decisions should be recognized in outlays and the deficit when the decision to spend is made. Some argue that a capital budget, which would recognize the cost of investments over their useful lives--long after the decision to spend--would profoundly weaken the constraining influence of the budget. Depreciation is only an after-the-fact measure that cannot be used to control investment spending.

To increase the likelihood that capital spending could be controlled under a capital budget, new mechanisms to ensure budget discipline would need to be instituted. Caps on federal investment spending could be set

annually and incorporated into the budget resolution. These targets would be analogous to the targets set for discretionary spending under current procedures. An incentive may exist, however, to increase these caps at the expense of other spending.

One way to reduce that incentive would be to require higher tax revenues or offsetting cuts in spending at the point that depreciation was charged to the operating account. Some analysts believe that the decisions on new investment would be constrained by the perception that new taxes or spending cuts would be triggered as depreciation charges are registered. Others argue that such a buy-now, pay-later process would encourage excessive capital spending. Without explicit annual decisions on federal investment spending, recording depreciation as outlays, and establishing tough enforcement of operating-budget norms, the capital budget is not a reasonable alternative to current practices.

Even if such control mechanisms could be established, two other problems would remain. The first is that there is not a market to check on the desirability of public investment. Some analysts argue that nonfederal investment, undertaken by those subject to market discipline, is likely to be more productive than federal investment because the latter may be guided by parochial political considerations. And, in fact, adopting a federal capital

budget per se would not supply a useful procedure to separate productive from unproductive federal investments. Under either the unified budget or a capital budget, calculating the cost and benefits of an investment and comparing it with other investment opportunities is the only rational means of making federal investment decisions.

A bigger hurdle facing the Congress would be trying to establish procedures to balance the operating budget under a capital budget system. The operating-account deficit would be the current deficit less net federal investment (that is, federal investment spending minus depreciation).

Our rough estimates indicate that in recent years depreciation of old investment has been fairly close to the amount of new investment. As a result, the current federal deficit is a proxy for the deficit of the operating account under a capital budget. In the near term, the reduction required to achieve a balanced budget would be little different under a capital budget regime.

Deficit reduction has been an elusive objective and would remain so under a capital budget. Although in principle an operating-budget rule could be designed to guarantee an operating-budget balance over the business cycle, past experience suggests such guarantees are less than iron clad. A continuing

inability to balance the operating budget would lead to continued inadequate national saving and undercut the rationale for capital budgeting

Proposed Capital Budget Legislation

Both H.R. 1050 (sponsored by Representative Clinger) and H.R. 1182 (sponsored by Representative Wise) would establish similar forms of capital budgeting. They would also make other major modifications to the budget (for example, classifying spending according to different funds).

A review of these bills in terms of the analysis above raises several issues. First, both bills exclude research and development and human capital from their definitions of investment. As such, they arguably exclude federal spending that may increase future economic output. In general, these exclusions illustrate the difficulty in classifying spending into investment and operating components. Second, the bills do not indicate how depreciation schedules will be determined and kept consistent. Most important, neither of the bills provides a mechanism for setting annual limits on investment spending. That is, they would not set caps on total investment, nor do they specify any other means for the Congress to regulate new investment. As

indicated above, depreciation charges arise after the decision to invest is made and cannot be the point of control for current spending.

More positively, H.R. 1182 does take a step for moving to a balanced budget norm for the operating account by requiring the House Budget Committee to submit legislation that would eventually eliminate the operating account's deficit--a welcome recognition of the pressing need to get national saving to the right level.

CONCLUSION

The need to increase national saving is critical. To accomplish this increase, the number one priority for budget policy should be to reduce spending on consumption by private or federal sources. Although a capital budget may provide a more explicit process for examining the appropriate mix of public and private investment, and may provide a more accurate measure of the split between federal investment and operating costs, this consideration is secondary to increasing national savings. Moreover, the capital budget poses significant risk of increased consumption during a time when reductions in such spending are needed.

Rather than moving to a capital budget, it may be more appropriate to continue work under way on determining how to identify federal investment and how to measure depreciation on federally financed investment. These figures could be used to guide budget planning for meeting national savings objectives even without a formal capital budget. When a balanced budget is closer to being achieved, establishing a capital budget may be more attractive than it is today.

Critics suggest that failure to enact a capital budget now will result in a rapid decline of productivity as American infrastructure becomes completely obsolete. An increase in federal infrastructure spending, however, requires no new budget procedures. If there is a consensus that the return on new federal capital exceeds returns on alternative uses of resources, then such spending should be enacted. Adopting capital budgeting to deal with this problem, however, would be a high-risk solution.