Common sense suggests that there should be a strong and logical connection between the two sides of the budget. If an average citizen in any country is asked what he or she thinks about the desirability of a particular expenditure increase, the answer is often related to how the respondent thinks the increase will be financed. Similarly, while people do not like tax increases, again their attitudes seem likely to depend to at least some extent upon what they think will be financed.\textsuperscript{1} People are right. Revenues and expenditures are inextricably linked. Nonetheless, most formal economic analysis of either tax or expenditure changes assumes that there is no connection between what happens on one side of the budget account and what happens on the other side. This note explores a few of the issues that arise when we take seriously the need to consider both sides of the budget when evaluating public expenditures.

The Traditional Approach
Governments usually extract resources coercively through taxation. The costs of doing so—both the administrative and compliance costs and the excess burden or deadweight loss of taxation—thus need to be taken explicitly into account in determining the appropriate level of public expenditure. As Stiglitz (2000, p. 148) puts it: “since it becomes more costly to obtain public goods when taxation imposes distortions, normally this will imply that the efficient level of public goods is smaller than it would have been with nondistortionary taxation.” Many attempts to estimate the costs of taxation—or, more precisely, the Marginal Cost of Public Funds (MCF)—have been made over the years. Although it is clear that “the MCF ultimately depends not just on the tax, but also on the nature of the government expenditure under consideration” (Ballard and Fullerton 1992, p. 125), the standard model focuses solely on the excess burden imposed by taxation. The numbers reported in such studies have tended to creep up over time.

Interestingly, however, although the initial impetus for this work was to provide a basis for evaluating whether any particular increase in expenditure was worthwhile, for the most part the estimated marginal costs of public funds have not been explicitly factored into cost-benefit or project evaluation exercises. Instead, in most treatments of cost-benefit analysis attention has been focused on the related, but distinct, question of the social opportunity cost of capital—an approach that focuses not on the MCF but rather on the intertemporal cost of capital. If capital markets are perfect and government and private discount rates are the same, the source of finance is irrelevant since the opportunity cost of the resources used for any project will be the same in any case. But if discount rates differ, as many have argued they do (and should), or if capital markets are less than perfect, as is invariably the case in developing countries, this is no longer true. In general, therefore, it seems plausible that the costs of finance will be greater when the resources used for public purposes would otherwise have been invested. From this perspective, as Musgrave (1969) noted, loan-financed projects would as a rule appear to be more costly than tax-financed projects since they are more likely to displace private investment. Nonetheless, expenditure analysis often assumes investment projects

\textsuperscript{1} Politicians are, of course, well aware of this connection, as evidenced by the many taxes that have been implemented over the years by tagging them with such ‘good’ names as health, education, and defense.

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will be financed, and should be financed, by loan finance.\(^2\)

**Theory meets Practice**

Devarajan, Squire, and Suthiwart-Narueput (DSS) (1997) argue strongly that the marginal social cost of public funds should be taken into account in evaluating projects that call for net flows of budgetary funds. Unless this is done, they argue, the net present value of such projects will be systematically overvalued and hence, as suggested by the textbook wisdom cited earlier, the public sector will be inappropriately expanded. Since even Harberger (1997), long an advocate of the standard convention of much cost-benefit analysis of assuming that the marginal source of funds is borrowing in the capital market, agreed that deadweight losses due to financing should be included as part of project costs, it appears that, at last, theory and practice agree on this point.

**But Issues Remain to be Resolved**

Before introducing an “MCF factor” in project analysis, however, several important considerations need to be discussed further:

- What precisely is to be included in the “social marginal cost of public funds”? Is it just deadweight losses? Should it include also administrative costs? Compliance costs? Should it be expanded further to include a variety of other costs involved in raising public revenues?\(^3\)

- While if taxes were set optimally, MCF would be the same for all tax sources, in fact MCF may vary considerably from tax to tax and may, as noted below, even be less than one. One must therefore assume either that the “marginal” expenditure will be financed in the same way as the “average” expenditure is now financed or make some other explicit assumption about the source of finance (such as the traditional assumption that the funds will be borrowed).

- What if the expenditures being considered are funded from taxes that are not distorting? Or from user charges? Or debt? Or from earmarked taxes or other 'delimited' taxes, such as those levied by local governments?

As Ballard and Fullerton (1992, p. 129) note, “…economists should set aside the apparent presumption that the marginal benefits of a tax-financed public good must exceed its dollar cost.”\(^4\)

- Finally, is it correct to treat the efficiency costs of public revenues as a cost without taking into account any distributional benefits that may be associated with such costs (Kaplow 1996)?

**The Wicksellian Connection**

Without going into detail, consideration of these and other issues suggests strongly that financing matters in cost-benefit analysis. It matters for two distinct reasons. The first reason is simply because how a project is financed can and should affect the net present value of benefits to be expected from it, and hence whether it is worth doing or not.

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\(^2\) Musgrave (1997) argues that for people to make rational fiscal decisions, they need to be able to compare the benefits and costs of such decisions, which means they have to take into account both the expenditures to be carried out and the way in which they are financed. If the expenditure in question is one that will yield a future stream of benefits—that is, an investment in either physical or human capital—it would be rational for a private individual to borrow to finance it. The same is true for a society, so the use of loan finance for public capital formation—along with procedures such as capital budgeting to make the linkage clear—has much to be said for it as a means of ensuring that the political process through which public goods are provided yields the desired time path of total (public plus private) consumption.

\(^3\) Usher (1991) adds such “hidden costs” as the overhead costs of tax collection and provision of services, the concealment costs incurred in tax, and the enforcement costs of dealing with these problems and constraining corruption.

\(^4\) Note, however, that Kaplow (1996) suggests that while such considerations should, if important, be taken into account in appraising particular expenditures, they do not justify any general adjustment of the MCF used in expenditure analysis.
The second reason for being concerned about how public expenditures are financed is more basic. Indeed, it goes to the heart of the central problem of public economics: what should governments do, since what governments should do is inseparably entangled with the question of how whatever they do is to be financed. Not only is the proper treatment of efficiency costs inextricably related to distributional concerns—since one can never assume in developing countries that there is a well functioning tax-transfer system to take care of such issues—but more importantly it is critical to ensure that the linkage between expenditure and revenue decisions is as clearly established in the budgetary and political process as possible. It is not enough to be able to define “optimal” outcomes: if one wants to see those outcomes become reality it is essential to strengthen what has been called the “Wicksellian connection” (Breton 1996) between expenditures and revenues. Taking into account the financing side of public expenditures is not thus simply something that can (or should) be factored into project evaluation by some (non-existent) omniscient observer who will, on the basis of his or her impartial weighing of the evidence, decide what is best for society—and especially not for someone else’s society! Rather, it is an essential component of the process by which good budgetary decisions—decisions that, as closely as practically feasible, reflect people’s real preferences—can be obtained in any society.

The point is not that user charge financing or capital budgeting is always preferable to general fund financing and budgeting. In many instances, such practices have arguably produced worse results than those that might have emerged with a soundly conceived and executed comprehensive budgetary system and a uniformly applied expenditure evaluation system. However, few developing countries have such systems in place. The fact that something has often been done wrongly in no way detracts from the basic argument that it can be done rightly and that, when so done, it will produce outcomes more in accordance with society’s wishes and resources.

DSS (1997) correctly stress the importance for good expenditure analysis of carefully specifying the “appropriate counterfactual.” In effect, what is suggested here is, first, that in at least some instances that “appropriate” counterfactual may suggest that one should not automatically apply an MCF correction to budgetary flows, and second, and in many ways most importantly, that thinking through correctly the links between expenditures and revenues is critical not just for good project analysis but more fundamentally for good government. The key to good results in project selection as with governance in general lies not in any particular budgetary or financing procedure but rather in implementing an institutional framework that, to the extent possible, links specific expenditure and revenue decisions as transparently as possible.

References


