



ECONOMIC BRIEF NO. 23

Measuring All Benefits and Costs

This series of economic briefs explores fundamental concepts in economics and community and economic development.

After questions were raised about the size of incentive packages that South Carolina offers new industry to locate or expand in the state, the General Assembly passed an act which requires that benefit-cost analysis be applied to incentive packages.

Since ordinary citizens may have legitimate worries that too much tax revenue is being given away relative to the benefits that a new industry may bring,

competent practitioners working independently on a benefit-cost analysis of the same project may well emerge with different estimates of benefits and costs, with each estimate arguably plausible. Yet over the years, certain kinds of standards and rules have emerged for doing benefit-cost analysis that are adhered to by all good practitioners.

One of the most critical of these standards is called *the with and without test*. The logic of the test is as follows: one cannot fairly claim as either benefits or costs of a particular project those things, both good and bad, which would likely have

is the *increase* in their incomes, not the total new income. We would need to measure incomes *with* the new plant and *without* the new plant.

Taking our example a step further, it is likely that existing South Carolina employers who lose workers to the new plant with higher wages will, if the labor market is tight, have to pay higher wages to the replacement workers they hire or spend money on labor saving capital. The higher wages at the second plant could be a net benefit of the new plant, even though it occurs indirectly. But so, too, could the higher wages be a net cost to business in South Carolina that would need to be acknowledged on the cost side of the benefit-cost ledger.

Clearly benefit-cost analysis can get intensively technical, and anyone who does not understand the technicalities is vulnerable to being misled. Lay citizens trying to make sense of a benefit-cost analysis should insist that the assumptions be made clear and that those assumptions be logically defended. Benefit-cost analyses, applied with seriousness of purpose by competent practitioners can be a useful discipline in decision making. But unless a citizen is satisfied about the assumptions, they might well treat any particular benefit-cost analysis as nothing more than a set of meaningless numbers.

One cannot fairly claim as either benefits or costs things both good and bad that would likely have happened even if a project were not undertaken.

community leaders need to learn how to read and evaluate such benefit-cost studies.

Benefit-cost analysis has been a standard tool of applied economics for more than half a century. In its simplest form, such analysis is nothing more than an earnest effort to identify and measure all costs and all benefits that arise from an activity like a new plant opening and then to compare those total benefits and costs to see which are higher.

In practice, benefit-cost analysis is an art as much as a science. Two different sets of

happened even if the project were not undertaken. So to identify and measure benefits and costs of a project, one must first forecast what would likely have happened without the project.

For example, suppose a new industrial plant in South Carolina will create 1,000 new jobs with total annual wages of \$30 million. Is all that \$30 million a net benefit to South Carolina? Not if some of the workers who take those new jobs leave other jobs in South Carolina. They may take the new jobs because they pay better, but the benefit