

foreseeable results. It is becoming the custom to call an attempt to express such a relation quantitatively "cost-benefit analysis."

A simple form of cost-benefit analysis is the old-fashioned bookkeeping of the corner grocer. It is generally fairly reliable because it deals with past events. Its usefulness is not questioned because it is obvious, and the significance of the resulting balance is understood. In attempting to apply cost-benefit analysis in budgeting for future benefit, on the other hand, a number of difficulties arise, some of which are particularly important when it is a matter of government spending.

The government's budget covers, besides research, other very different activities, e.g. technical services, regulatory functions, administration, etc. Also the benefits are of many different kinds, e.g. health, foreign trade, prestige, security, etc. The problem might be simple if we could assume that the contribution which each activity makes to the collective benefit is proportional to the dollars spent on it. Obviously there can be no justification for such an assumption. Cost-benefit analysis requires some identification of the contribution of each cost item to each benefit. Conversion factors must be introduced in the calculation to reflect quantitatively the relative importance of a dollar spent on different items. The assignment of values to these conversion factors, clothed in mathematical notation and accompanied by lavish use of unusual words, is likely to be left by default to the personal