

Value Typology In Cost-Benefit Analysis

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Published in: *Environmental Values*, 2012, 21(4): 499-524.

Preprint at: http://sethbaum.com/ac/2012_Value-CBA.html

Background: Cost-Benefit Analysis (CBA)

CBA is a major approach to evaluating options in a decision. It is especially prominent in public policy decision making. In the most general terms, a CBA compares the costs (negative consequences) to the benefits (positive consequences) of each option. *This paper explores the nature of “costs” and “benefits”, focusing on the types of values that they hold.* In doing so, it strengthens our understanding of existing CBAs and suggests new innovations in CBA design.

Background: Value Typology

Value typology concerns not ‘What holds value?’ but ‘What type of value does it hold?’. This paper presents a new application of value typology to CBA. The typology used here comes from the philosophy literature. It features three value types: *intrinsic value* (that which is valuable for its own sake), *instrumental value* (that which is valuable because it causes other value), and *signatory value* (that which is valuable because it signifies the occurrence of other value). This value typology is applied to three forms of CBA.

Money-Based CBA

In money-based CBA, all costs and benefits are measured in monetary units. Money-based CBA is by far the most widely used form of CBA, especially for public policy. However, it is very difficult to tell what types of values are held by costs and benefits in money-based CBA. There are many interpretations of value typology in money-based CBA, but almost all of them require unsatisfactory ethical justifications. In other words, *when we consider value typology, we see that it is difficult to justify money-based CBA.* Furthermore, the strongest justification of money-based CBA actually involves treating it very similarly to social welfare-based CBA. This important result suggests that we should reconsider how we evaluate public policies and other actions.

Social Welfare-Based CBA

In social welfare-based CBA, costs and benefits are evaluated based on how they affect the total amount of welfare in society. Costs and benefits here could be measured in monetary units, but they will often be adjusted to account for the idea that a dollar brings more welfare to the poor than to the rich. It is very clear what value types are held by costs and benefits in social welfare-based CBA. For example, welfare holds intrinsic value. *This clarity makes social welfare-based CBA easier to justify, although it can be criticized for only placing intrinsic value on welfare.*

Intrinsic Value-Based CBA

Intrinsic value-based CBA is an extension of social welfare-based CBA in which anything can hold intrinsic value. The idea of intrinsic value-based CBA can be found in some previous work but is formally defined and developed in this paper. Indeed, the consideration of value typology leads directly to the idea of intrinsic value-based CBA. *Intrinsic value-based CBA is a major innovation in CBA theory because it significantly broadens the potential scope of CBA in a way that features the same clarity about value typology as is found in social welfare-based CBA.*