

Cost Benefit Analysis of Mega Projects : some learnings from the MOSE mobile dam in Venice

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Research question

Mega projects are routinely considered by the policy makers as economic improvements for the local and national communities. In the best hypothesis ex ante evaluation is performed through a Cost Benefit Analysis with the view to provide normative conclusion on whether (and how) a given infrastructure should be constructed. Yet, there is little ex post investigation on how much the Cost Benefit Analysis was influential and properly helpful in designing proper policies... Some concerns have been expressed in pioneering analysis of Flyvbjerg on cost overruns and traffic overestimations, but these pioneering works need to be completed with more case studies and a comprehensive approach of the various elements that constitute a proper CBA (including private adaptation costs, externalities, etc).

In this context, our aim is to analyse how the CBA of a given mega projects provides insights about what should be done and what should be avoided in evaluation. Elaborating on previous research in the field, we elect the MOSE mobile dam project in the Venice lagoon. While not being a transport project, we posit that learnings deriving from such a project are relevant, *mutatis mutandis*, for the more general field of infrastructure evaluation.

Methodology

Our method is documental. We investigate the various analysis that have been performed during the conception of the project.

Main results and references.

At this stage, our main results suggest that CBA completely missed the point in the evaluation of MOSE. More precisely our findings are that.

- MOSE CBA can be said to have impacted, although marginally, in favor of the realization of the infrastructure,
- CBA discussion has concentrated on the consequences of the project that were most tangible to local population with limited consideration of how each single aspect could affect the global net benefit of the project.
- CBA can be distortive until it does not consider the dual nature of most costs and benefits: apart from externalities, costs for some users are benefits to other. The lack of consideration of this identity results in boundary effect that result in flawed results.
- More fundamentally, CBA stuck to the pseudo neutralist view that project construction costs should be accepted uncritically from external sources. Such a practice, that is ubiquitous in evaluation, can prove highly damaging. This element suffice to make unchanged CBA practices actually damaging to society.

We investigate how these conclusions affects other types of projects in the field of transportation.