# Cost-benefit: towards recognition of complementarity between quantitative approach and qualitative approach of the sporting phenomenon?

## A monetary calculation

Cost-benefit analysis is a decision-making tool developed to optimise the use of scarce resources to meet human needs. Thus, the decision of whether or not to engage in a given project will require measuring its benefits and costs, and it will be considered legitimate if the decision-maker anticipates a net benefit. In the case where several projects are in competition and all show a net benefit, the choice will be made for the one with the highest net benefit. This general principle applies to both public and private decisions.

Decision-makers commonly use cost-benefit analysis because this method has proven its operationality. It has been strongly influenced by neoclassical theory and has undergone a twofold evolution. Initially, it was part of the unicriteria methods relating solely to the monetary evaluation of market exchanges. The cost-benefit calculation concerned only the tangible effects of the project, i.e., those that belong to the market sphere and do not pose major evaluation problems. In a second phase, it was necessary to integrate the non-market effects (externalities) which are much more difficult to evaluate.

The solution has been to establish shadow prices using specific methods of preference revelation (substitution markets, contingent valuation, monetisation of physical effects). The principle is always the same: the preference of individuals is used as the basis for measurement and it is assumed that this preference is reflected in a willingness to pay. The amount that people are willing to spend on a good or service would be a better indicator of the utility they attach to it. The sum of individual willingness to pay provides the total economic value of the goods or service in question.

Such an evaluation of externalities has been strongly contested insofar as certain costs and benefits are not quantifiable in monetary terms or, for which monetary quantification makes little sense. How much is the deterioration of a country's image following the organisation of a major contested sporting event 'worth'? How much is the improvement in the quality of community life following the hosting of a successful sporting event 'worth'?

For this reason, such a monetary assessment has been increasingly discussed by economists for several years. One of the most emblematic elements of the debate is certainly the reappraisal of the gross domestic product (GDP) as a measure of a nation's standard of living.

## Criticisms of monetary evaluation

It was thus realised that GDP was not a good indicator because it does not allow a measure of well-being; it does not measure social inequalities; it does not allow a fair measure of environmental costs. All this means that wrong decisions have been made based on this indicator. There has been debate amongst experts (e.g. around the Stiglitz et al. report [2009]) as to what could replace GDP to improve decision-making. This debate has been structured around two questions:

- Is it necessary to construct a new synthetic indicator of sustainability? The best known is certainly the ecological footprint, which is a departure from monetary indicators. Many other indicators of this type have since been constructed: human development index, social health index, happiness index, vulnerability index, Happy Planet Index, Genuine Progress Indicator, etc.
- Should a dashboard be developed? This involves choices: How many indicators? How to choose them? Should they be prioritised? Everyone presently agrees that we should not multiply the number of indicators.

Whatever option is taken, the real problem seems to us to lie in the choice between monetary or non-monetary indicators. This involves a real choice for society and is not just a simple technical option. This is what is at stake in the construction of new indicators to measure what really counts: the quality of human relations, education, health, etc. Developing new indicators and new accounting systems is urgent. We need additional benchmarks for further policies in the service of a new social project. Material development is only one component, amongst many others, of a nation's wealth. Thus, in the Gross National Happiness indicator used in Bhutan, four dimensions are taken into account: the conservation of nature, the promotion of culture, the development of a sustainable economy and good governance of institutions.

## The restoration of quality

Beyond monetary/non-monetary opposition, there is another divide with the quantitative/qualitative opposition. Indeed, there are dimensions of societal life that are rather difficult to quantify: social ties, quality of life, social recognition, quality of human relations, etc. Quantification is not impossible, but there is a strong risk of diminishing the content of these notions. It is therefore recommended that monetary cost-benefit analyses be supplemented by happiness measurements based on satisfaction surveys that allow comparisons to be made between areas where the units of measurement are

different. The economics of happiness thus offers a simpler measure than the monetary value of the agents' willingness to pay. This is why economists are now suggesting that quantitative indicators should be supplemented by qualitative analyses. The latter takes the form of interviews that make it possible to identify field experiences in detail and to make a judgment on the social utility thus identified. Thanks to this type of analysis, it is possible to obtain a more serious measure of the depth of reality than with a large number of statistical indicators.

We must insist on the complementarity of these two approaches and above all avoid denigrating one in the name of promoting the other:

- For a very long time, quantitative indicators were favoured for their 'scientificity' even though they could be reductive. Whether at the level of researchers or decision-makers, quantification still holds a certain fascination. It gives the impression that decisions can be made on a scientifically sound basis.
- Qualitative evaluation, which is more common amongst social scientists and ethnologists, has had a much harder time penetrating the field of economic analysis. Indeed, the subjectivity of such an evaluation has always been a problem for economists, who need quantitative data to test models.

### Multi-criteria analysis: an alternative?

Given the failure of monetary instruments, new analyses were developed, in particular multi-criteria analyses. From a theoretical point of view, we find here all the influence of the criticisms made of the concept of rationality and its use in economic science. With the work of Herbert Simon, the principle of "limited rationality" began to be accepted, making it possible to understand that "the one best way" is a utopia. Experience shows that decision-makers settle for the first satisfactory solution that comes along rather than the best one that they may never achieve. It is no longer a question of finding the best solution as in the cost-benefit calculation, but of informing choices.

This is why the multi-criteria methods that appeared at the end of the 1970s as a reaction to neo-classical analysis were intended to be instruments to assist collective negotiation. The aim was not so much to measure the effects of a project but rather to serve as a negotiation. To do this, the methods had to be adapted to such a development. The multi-criteria analysis of a project consisted of several stages: identification of the actions to be carried out; determination of the assessment criteria; evaluation of the actions;

weighting of the criteria; aggregation of the particular measures; comparison of the variants.

The same methodological problems are still present: scoring, weighting, aggregation, and comparison, but the originality of the multi-criteria approach is that it allows stakeholders to participate at each of these stages. It is no longer a question of imposing a technocratic or scientific study, but, through a broad participatory process, of bringing out a compromise that takes into account the preferences of all the actors concerned.

It must be acknowledged that multi-criteria analysis also poses formidable methodological problems and has not succeeded in supplanting cost-benefit analysis. The traditional calculation in monetary terms is still mainly used by economists as a decision-making tool and sport has not escaped this.

## Social profitability of the sporting spectacle

Prior to hosting mega-sporting events, a social profitability calculation including all the costs and benefits, both tangible and intangible, should be systematically carried out. Unfortunately, decision-makers do not commission such studies, which would be very long and costly, and are satisfied with lighter but more questionable justifications. This calculation of social profitability takes a back seat to a calculation of economic impact used to justify the legitimacy of the project, which is not correct. The calculation of economic spin-offs only makes it possible to measure the extent of the impact (added value or employment) of the event on the region. This calculation cannot in any way be used as a decision-making tool on its own. There is, therefore, a twofold insufficiency in this type of approach: on the one hand, the ex-ante impact calculations are often wrong and generally overestimated yet, on the other hand, the assimilation of a calculation of economic impact to a calculation of profitability is completely illegitimate.

The social profitability of the event should also now include all the externalities linked to the environment. For example, the priority of combating climate change will require a review of our models of generalised mobility, particularly air transportation. This could lead to considerable changes in the organisation of mega-sporting events such as the Olympic Games. Should we abandon the idea of organising major events in places that are far from the dominant geographical origins of spectators? Should airlines be required to internalise their costs? Should spectators be made to pay an eco-tax? It is, therefore, necessary to educate public opinion about the need to introduce eco-taxes, as well as political decision-makers so that they have the political courage to push for them. It is thus clear that the solutions to the current global challenges cannot be technical. The most urgent thing is to change behaviours and values in order

to bring about a new model of social organisation, which could completely challenge the design of mega-sporting events.

We believe that all these evaluations should not be based on a single cost-benefit calculation made by experts. Indeed, the externalities linked to mega-sporting events are such that their evaluation is not possible in a satisfactory manner. A negotiated solution based on a citizens' conference seems preferable.

## Further information:


Wladimir ANDREFF and Stefan SZYMANSKI (eds*), Handbook on the Economics of Sport,* Edward Elgar, Cheltenham, 2006.

Eic BARGET et Jean-Jacques GOUGUET, *Evénements sportifs : impacts économique et social,* De Boeck, Bruxelles, 2010.

Jean GADREY, Florence JANY-CATRICE, *Les nouveaux indicateurs de richesse,* La Découverte, Paris, 2005.

Michel GARRABÉ, *Ingénierie de l'évaluation économique*, Ellipses, Paris, 1994.

Bernard ROY, *Méthodologie multicritères d'aide à la décision*, Economica, Paris, 1985.

Claudia SENIK, *L'économie du bonheur*, Seuil, Paris, 2014.

Jean SIMOS, *Evaluer l'impact sur l'environnement. Une approche originale par l'analyse multicritère et la négociation*, Presses Polytechniques et Universitaires Romandes, 1990.

Joseph STIGLITZ, Amartya SEN et Jean-Paul FITOUSSI, *Rapport de la commission sur la mesure des performances économiques et du progrès social,* La Documentation Française, Paris, 2009.


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