

Indexing the performance of social agents

An approach based on social planning

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Background: An indexing system should be designed, viewed as a cybernetic device, to support the policy-maker (PM) in steering a complex system constituted by a set of autonomous social-agents (districts, hospitals, etc.), through a “planning of goals” toward the pursued overall goal. Typically, in setting goals, various perhaps antagonist criteria are considered, eg “to improve the fitness of the citizens whilst containing public expenditure for them”. The “performance” of a social agent is that which emerges from the behaviours of the individuals which it governs.

Objectives: (1) To delineate the operative construction of an index, based on the planning of goals in a multi-purposes setting, for evaluating the performance of social agents from the view of the PM. (2) To show that any specific concrete index above is an instance of a type of abstract index, properly re-interpreted into the formal platform of the Decision Theory (specifically, the RDEU theory, eg see Chateauneu et al, 2004).

Methods: The PM imagines that the ideal overall-goal is figuratively deployed (considering principles and criteria of social interest) through a “chain of increasingly stringent goals” (this is the planning). For any social agent, the “performance” is related to the ability of moving the governed individuals in advancing the goals-chain, toward achievement the PM's overall goal. For each goal of the chain, it is associated a parameter which represents the probability of going over. Thus, borrowing mathematical terminology, any social could be associated to a parameters profile which describes its “capacity” against the planning. It's capacity could even be generalized using a subjective weighting function which modulates, for example, the PM “aversion to social risk”. However, the “social value” (D'Epifanio, 2009) of the performance also depends on the assumed criteria for assigning a “value” (eg utility based) to the goals in the planning.

Results: A type of index will be proposed which, applied to any social agent, recursively cumulates value-increments on the goals-planning. It will be viewed as a synthetic index which is the weighted average of the “level-specific capacities”, the weights being the “standardized pro-capita increments of social value”. By construction, it will be coherent with basic principles in rational choices.

Main References

- Chateauneuf A., Cohen M., Meilijson I. (2004), Four Notions of Mean-preserving Increase in Risk, Risk attitudes and Applications to the Rank-dependent Expected Utility Model, *Journal of Mathematical Economics* 40, 547-571
- D'Epifanio G. (2009), Implicit Social Scaling. From an Institutional Perspective, *Soc. Indic. Res.* 94, 203-212