Abstract for "Intergenerational Equity, Social Status and Long-term Inequality"

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This paper deals with the measurement of societal welfare looking at streams of distributions of a relevant continuous economic variable (e.g., income, consumption or wealth) across individuals and through discrete time.

Our aim is to derive meaningful measures that will allow to decompose the evaluation of these streams into a sequence of ethically relevant comparisons from the economic and sociological perspective. The decomposition will make explicit the contribution to the overall intertemporal evaluation of the single period distributive evaluations, of the dependence across intertemporal realizations of the individuals, of the role of the status effect related to the relative positions of individuals or generations in the society, and of the dynastic inequality related to long term inequality for the same individuals or for a dynasty.

The core result of the paper is the axiomatic characterization of a multidimensional generalization of the generalized Gini social evaluation function [Weymark, J. A. (1981): Generalized Gini inequality indices, Mathematical Social Sciences, 1(4), 409--430] that will provide a cardinal measure of the welfare associated to the intertemporal societal streams. The obtained family of evaluation functions is a weighted average of the individuals realizations, where the weights depend on the period associated to the realization, on the position of the individual in each period distribution and on the dependence (formalized by the copula) between the societal distributions across time.

The rank mobility associated with the copula between the single period distributions will have an impact on the social evaluation in two ways, both directly by affecting the social weights of all individuals and indirectly through the sequence of ranks covered in time by each dynasty that affects the weight of the individuals belonging to each dynasty. The overall evaluation could be therefore made sensitive to overall rank mobility across periods and each dynasty evaluation can incorporate concerns for the movements in ranks/status across time of its members that can be exacerbated or mitigated by whether they take place in a mobile or immobile society.

Ethical concerns for intergenerational mobility, within time inequality and dynastic/long term inequality can be incorporated into the model by imposing appropriate restrictions on the shape of the weighting functions. As special cases of these evaluations it is possible to obtain the net present value of the generalized Gini social evaluation functions of each period or a weighted average of the net present value of the intertemporal realizations of each dynasty where weights depend on the status evolution of each dynasty (or individual) position across time.

The explicit role obtained in the general characterization result for levels of outcomes across time, individuals positions and dependence across time of the individual/dynasty realization makes possible to decompose the intertemporal dynastic weights applied to the realizations in order to highlight how various components (mobility, single periods inequality and long term inequality) affect the overall

evaluation. Comparisons of international panels of data may highlight different patterns in the distribution and values associated to each of these components and shed lights on their possible policy determinants.