

Abstract. In economies with uncertainty where agents have heterogeneous beliefs, it has been argued that the classical Pareto welfare criterion might be inadequate, as voluntary trade could result from mere betting on belief disagreement rather than on differences in tastes or risk aversion. In response, Gilboa et al. (2014) and Brunnermeier et al. (2014) suggested two alternative and more compelling welfare criteria: no-Betting (nB) Pareto and Belief-Neutral (BN) Pareto, respectively. We establish a first formal connection between nB- and BN-efficiency. We show that the set of nB-optima coincides with the union of the set of classical Pareto optima and the set of BN-optima, and we provide a social welfare characterization of these two sets of optima. Additionally, under an assumption of nonatomicity of the agents' beliefs, we show that there are σ -algebras generated by measure-preserving transformations on which the agents' beliefs agree. When the aggregate endowment in the economy is measurable with respect to such a σ -algebra, we show that the set of nB-optima and the set of BN-optima coincide with the set of classical Pareto optima in a specific homogeneous-belief economy.